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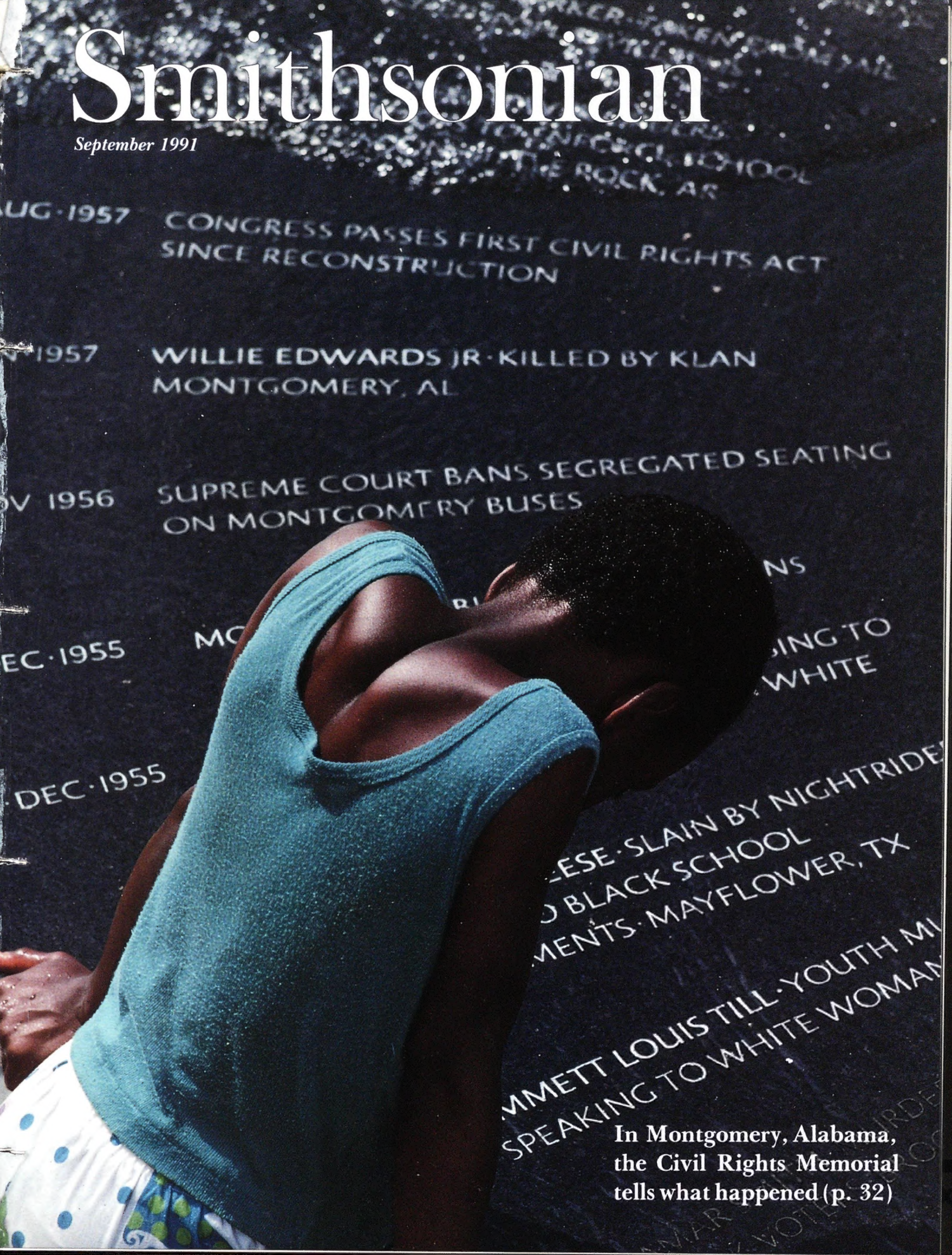
September 1991



In Montgomery, Alabama, the Civil Rights Memorial tells what happened (p. 32)

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nea

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September 1991

Smithsonian

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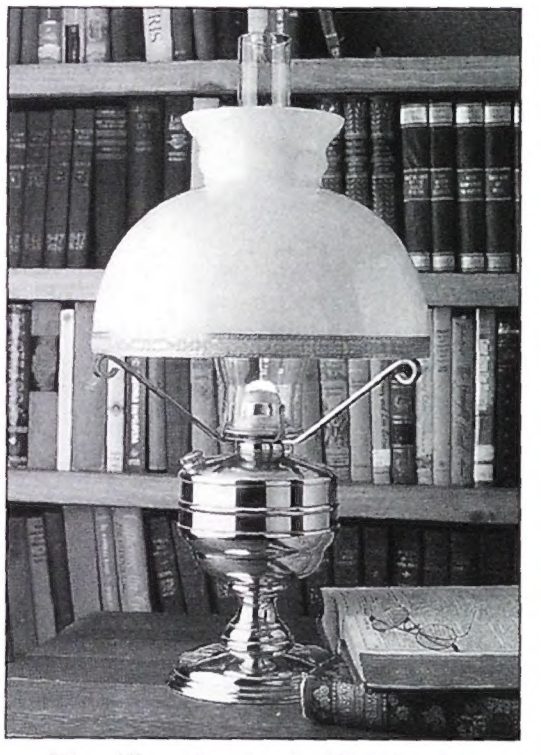

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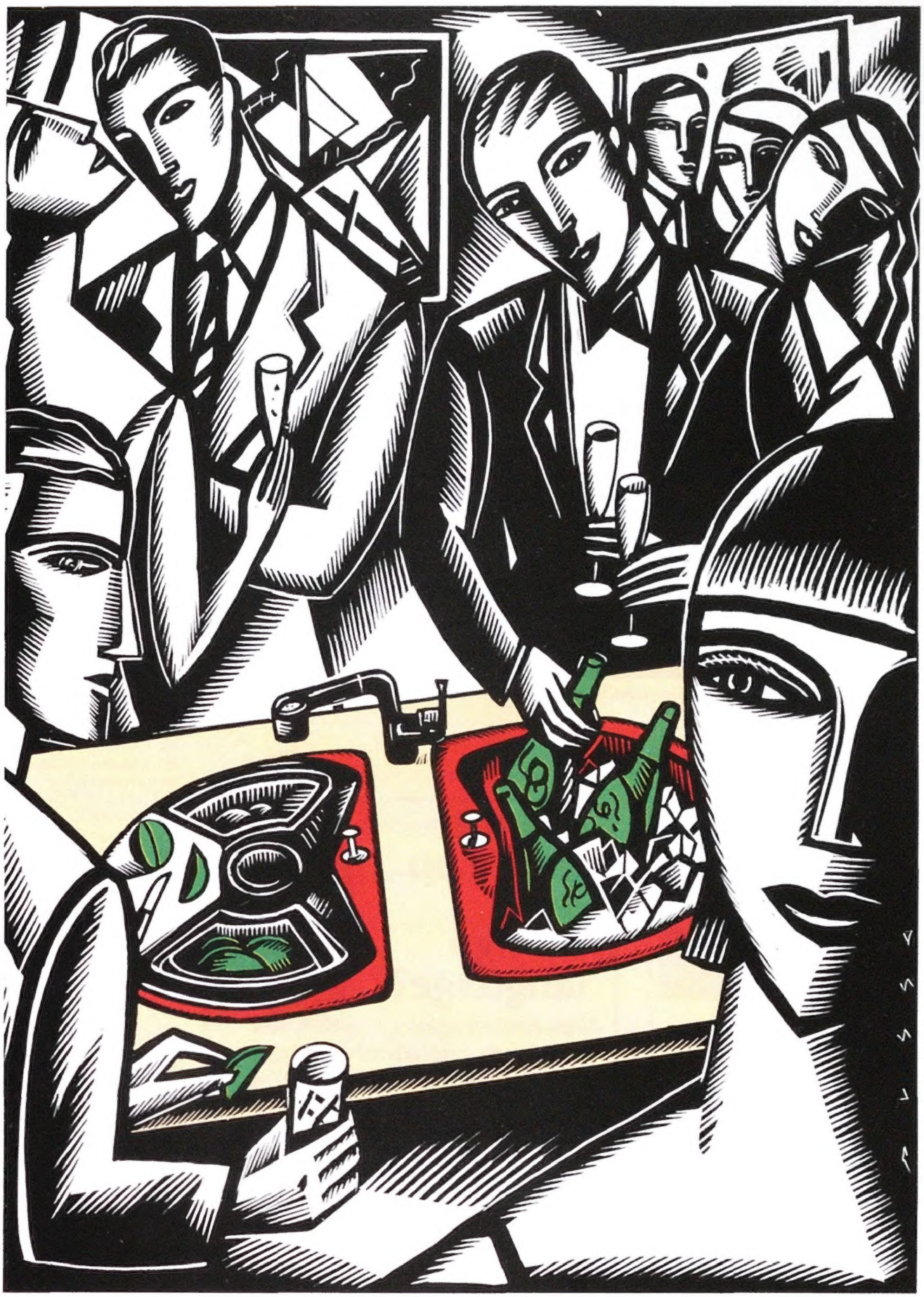

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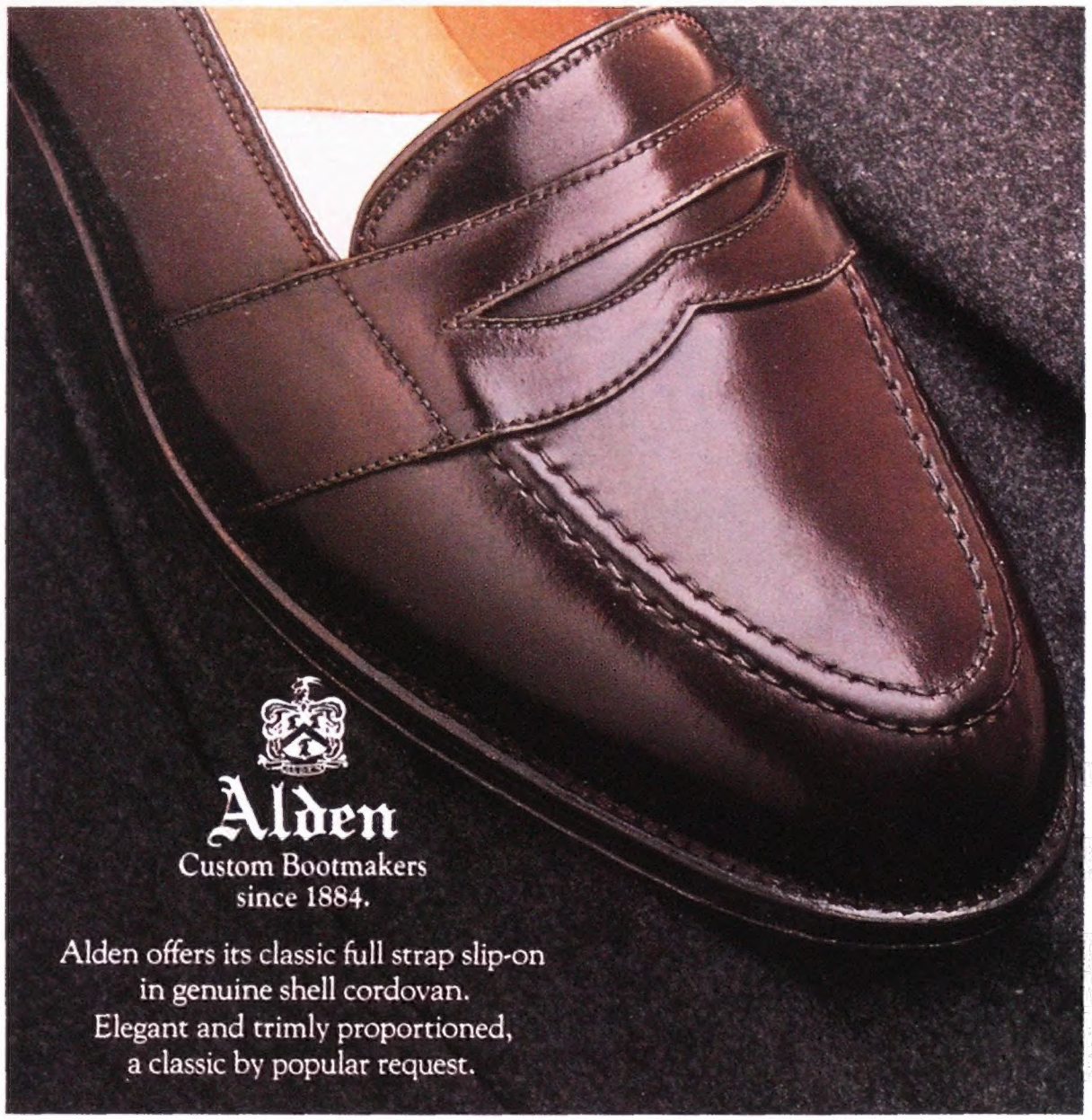

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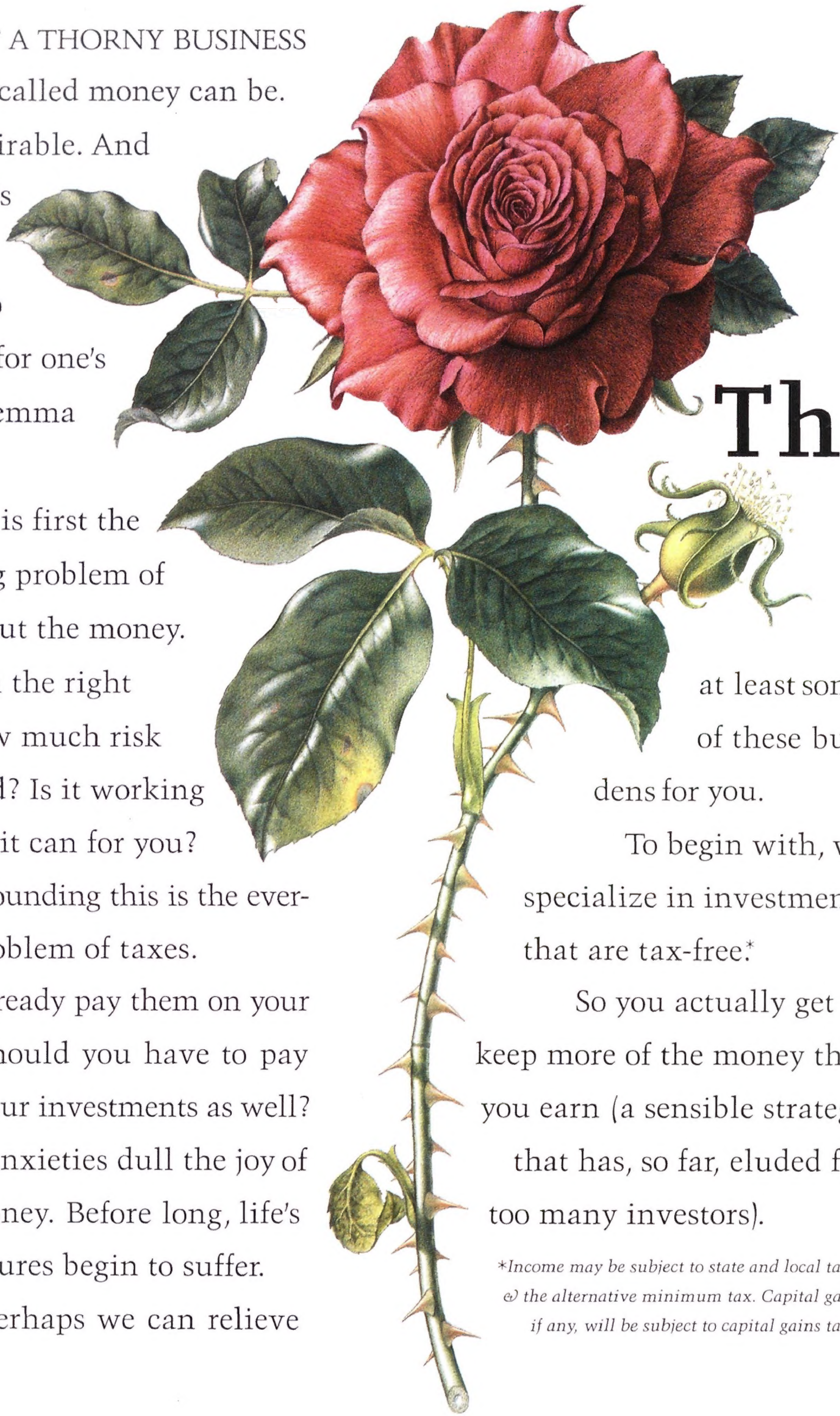

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Smithsonian horizons

A study of global warming prompts us to deal with, at some cost, challenges to the well-being of our descendants

Several years ago the Congress called upon the National Academies of Sciences and Engineering to conduct a study of global climate change. It would begin by establishing the scientific consensus as to the probable rate and extent of change itself. Also sought was an appraisal of the impacts on our economy and ways of life, and of policy options for mitigating and adapting to these impacts. The summary report of that study, *Policy Implications of Greenhouse Warming*, has recently appeared under the auspices of the Academies' operating arm, the National Research Council, and longer volumes dealing in more detail with "effects," "mitigation" and "adaptation" also are being published.

A generalist among well-qualified experts, I was pleased to participate in the group of nearly 50 who worked on this study. Climatic change is, after all, an overwhelmingly general concern rather than a matter for specialists alone. Two other issues were, in my mind, of interest nearly equivalent to this one: How can public attention be mobilized, and policy options resolved through democratic processes, when existing scientific understandings still involve substantial uncertainty and something less (although not much less) than unanimity? And how effectively can we bring ourselves to deal, at some present cost, with challenges not to our immediate well-being but to that of our children and grandchildren by the middle of the next century?

Almost all human activities, and many natural ones, are contributors to greenhouse warming. Water vapor, carbon dioxide, methane, the chlorofluorocarbons (CFCs), ozone and other constituents of the atmosphere block solar radiation to a lesser degree than they impede Earth's own infrared radiation out into space. The natural components of this imbalance make what would otherwise be a forbiddingly cold planet habitable, but the ones we have newly created or greatly increased threaten dangerous warming.

Carbon dioxide is the biggest single contributor to the greenhouse effect, but the problem cannot be simplified, let alone solved, by focusing on carbon dioxide alone. And carbon dioxide presents a special enigma of its own: about 30 percent of what is currently being produced apparently fails to remain in the atmosphere or oceans and cannot yet be accounted for!

As such gaps in knowledge suggest, there is little prospect of accurately predicting the timing or extent of global warming for some time to come. General circulation models, the principal tools for projecting climatic changes, are still limited in their capacity to take account of important factors like cloud-cover feedback and ocean circulation. Nor do older temperature records, and what is known of the accumulation of greenhouse gases in the past, persuasively support the current predictive accuracy of computer-driven models. We simply cannot account for much past and current variability in weather, some of it involving greater and more-rapid changes than those required by most projections of greenhouse warming.

Observing that we commonly buy insurance for events that, like fires, are unpredictable in timing or severity, the report favors a modest investment in insurance. The risk may be uncertain, but it is too great to be entirely ignored. Among the measures proposed is a study of "full social cost pricing" of energy, with the goal of gradually introducing environmental degradation as a factor in its cost. Others are steps toward enhanced energy conservation and efficiency—in building design, in improved automobile performance standards, in encouragement to utilities to recapture the costs of conservation in their rate-bases. The report's analysis suggests that a reduction in this country's greenhouse gas emissions by 10 to 40 percent below 1990 levels is feasible at low cost—or even at some net saving.

There are other difficult issues that cannot even be touched on here. Global change, for example, may be the right framework for scientific study, and significant warming is bound to be accompanied by world problems of mutual adjustment and simple equity. People generally must live with local changes, not global averages, and by any reckoning, there will be regional winners and losers. Unfortunately, potential regional disparities are even more difficult to predict accurately than are the overall global effects.

One finding is obvious and yet often overlooked: measures to maintain a healthy and growing economy and a strong research base, apart from improving our competitive position, are a form of preparation for future climatic uncertainties. More-advanced technologies will permit responses we cannot foresee today. And with economic growth, options can become practical whose cost today would be prohibitive. But regrettably, most at risk is the environment around us, since natural adaptation is most difficult to hasten with artificial intervention.

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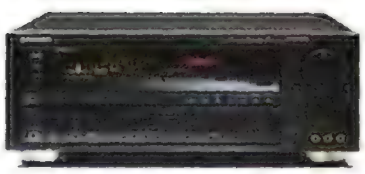

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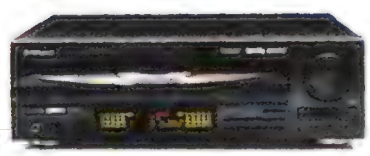

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Letters to the Editor

Calcutta

Dear Sir: I was born and raised in Calcutta, featured in your July issue. The cultural revival of Bengal, and indeed of India, may best be described as a reawakening of a people to their own glorious and magnificent past, and their efforts at reshaping their future via a reformist yet fundamentally Indian approach. Indeed, contact with Western culture and education acted as a vital catalyst triggering this revival.

All Nobel Prizes awarded *to* Indians or *for* work done in India have direct Calcutta connections. There was Rabindranath Tagore's in literature, and the 1930 physics award went to C. V. Raman for research done while working at the Indian Association for the Cultivation of Science. Ronald Ross' 1902 award in medicine was given for research on the malaria virus, conducted in Calcutta, and of course the 1979 award to Mother Teresa has well-known Calcutta connections.

One of the greatest philosophers of modern India, S. Radhakrishnan, was a student and a teacher at the University of Calcutta. And there is Satyajit Ray's illustrious father, the great literary innovator Sukumar Ray, whose nonsense verse, on a par with Edward Lear's and Lewis Carroll's, was nevertheless exclusively Bengali in spirit.
Monish R. Chatterjee
Binghamton, New York

Dear Sir: Since Calcutta hotel steward Kumar "pens one poem every morning," one might say that he goes from bed to verse.
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Visalia, California

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Dear Sir: Waterbury's Union Station, designed by the firm of McKim, Meade & White, was built in 1908. It is said that the president of the New Haven Railroad had been charmed by Siena's City Hall [the large building on the right, page 69], and decreed it be the model for his new railroad station.

In 1952, our newspapers, the *American* and *Republican*, bought the property in a fine example of historic preservation, added a mechanical wing and now publish from there.
Ruth Petrauskas
Waterbury, Connecticut

Barbed wire

Dear Sir: John Warne Gates was far more than a simple, though gifted, salesman. His acquisition of numerous competing barbed wire companies made him the country's leading source of the product.

He went on to many other business ventures. Not the least was his 1900 purchase (along with J. Pierpont Morgan and William Moore) of the world's largest steel company, from Andrew Carnegie—a cool $300 million for what is now U.S. Steel. Wagering large sums on the most improbable contests earned him the nickname "Bet-a-Million" Gates. His most famous bet involved a race between two raindrops down a pane of glass.

Wily as Gates was, if anyone had wanted to bet in 1900 that his barbed wire would sell for $100 a foot by the end of the century, he probably would have bet a million that it wouldn't. And lost.
Frank E. Wrenick
Cleveland Heights, Ohio

Dear Sir: On our ranch near San Antonio when I was a kid, my daddy, my brother Frank and I stretched miles and miles of "bobwire." (Much later I heard somebody, probably a college professor, refer to it as "barbed wire.") In those days any rancher who wanted to command respect built his fences with stout posts—cedar or mesquite—and he wanted the wire taut. Only trashy ranchers had saggy wire, like they had saggy houses and saggy horses.

To get the wire taut you had to use a mechanical fence-stretcher, pumping the handle notch by notch as you would a car jack. That could be dangerous. If there was a weak spot in the wire, it would snap as pressure was applied, and the broken end could fly back, the barbs cutting across flesh like so many whiplashed razor blades. My father had several deep gashes on his arm from snapped wires.

Historian Walter Prescott Webb, in his classic book *The Great Plains*, says Bet-a-Million Gates' demonstration of bobwire took place on Alamo Plaza, in front of Texas' most sacred shrine. Other accounts put it on Military Plaza, where City Hall now stands.

Around here, when bobwire was first introduced ranchers were skeptical, fearing horses and cattle would run into it and be cut. Flies deposit screwworm larvae in open wounds; livestock deaths could result. But instinctively sensing danger, these animals shied clear of the wire, and Gates' point was made.
Claude Stanush
San Antonio

Dear Sir: The picture of masked men cutting a barbed wire fence on pages 74-75 [detail below] is a reenactment of friction between homesteaders and cattlemen by Solomon D. Butcher, pioneer photographer of Custer County.
Norene Mills
Arnold, Nebraska
According to the Nebraska State Historical Society, Butcher reenacted an incident that took place when homesteaders clipped 15 miles of barbed wire fence on the Brighton Ranch. "Clippers" in the photograph are wood. Ed.

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Dear Sir: Texas didn't get where it is without a good measure of ingenuity. Late in the 19th century, out in the Panhandle, some rancher devised still another use for barbed wire. By rigging his crank-operated phone box to the top strand of his fence, he could call his neighbors without charge. They shared this free phone service by connecting their phones to a portion of fence running past their spreads. But a problem: every phone rang at the turn of anyone's crank. The solution: each neighbor worked out his own identifying ring, a combination of longs and shorts.
Albert Miller
Houston

Dear Sir: If Gates moved "across the wide Missouri" he would not have left the state of Missouri; to get to Illinois, he would have had to navigate the mighty Mississippi. Someone must have had the refrain of "Shenandoah" running through his head.
Paul J. Meketa
Sunnyvale, California
Yessir. Ed.

'Degenerate Art'

Dear Sir: I don't think it is easy for anyone to make sense out of the Nazis' "Degenerate Art" show, as it is hard to make contact with that point of view from this distance. However, it was made clear to me several years ago in Spain when I found a copy of the guide to the exhibition, prepared for the show by Fritz Daeser of Munich and printed in Berlin. A few excerpts from my translation of the text:

"Modern art is . . . destructive . . . deliberately barbaric . . . done with poor craftsmanship . . . a Jewish plot."

"It is antiestablishment . . . promoting anarchism through revolution . . . [and] the Bolshevik idea that the world is a brothel controlled by capitalists who exploit the proletariat."

"It is racist. It uses ideas from Africa and Oceania. It is the art of idiots, cretins and paralytics. . . ."

These and other assertions are supported by quotations from artists, critics and the Führer himself.

In 1938 the reaction of painter Ernst Ludwig Kirchner (whose works were included in the exhibition) to this and other events in the Nazi art world was: "Events in Germany have deeply shocked me, and yet I am proud that these brown-shirted iconoclasts are also attacking

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and destroying my pictures. I would feel insulted if that kind tolerated me."
R. M. Quinn
Tucson

Dear Sir: You identified Marc Chagall as a Frenchman. He was born in Vitebsk, in Byelorussia, in 1887 and did not move to Paris until 1910. He was very proud of his heritage.
Pati D'Amico
Providence, Rhode Island

Hot Springs

Dear Sir: Frank, Billy and Jack Flynn were my great-great-uncles, and so I am quite familiar with the Flynn-Doran dispute and gun battle. Frank and Billy lived to tell about it; Jack did not. Frank was wounded; Billy took a shotgun blast to the stomach but recovered and became quite a horseman, running racehorses from Chicago to Texas. He was quite the dapper fellow [below].

Family lore has it that Frank offered to buy Major Doran's casino at a fair price, telling him he could open one anywhere else in Hot Springs. The Major turned him down. You know the rest.

Shirley Abbott stated that Frank's tintypes wear "the expression of a man who could watch his best friend die on the rack and never whimper," but Uncle Frank did have a soft spot in his heart. Not long after the gun battle his sister and her husband, my great-grandparents, died, leaving my grandmother an orphan. Frank and his family took her in and, with Uncle Billy's help, raised her.

After the Louisiana Purchase, Thomas Jefferson sent one William Dunbar to explore the Arkansas area, as you mention; we are distantly related. My grandfather, W. T. Dunbar sr., known by his card and to folks from Hot Springs to Fort Smith as "Townsite Will," surveyed, bought and sold land and mineral rights in that part of Arkansas.
William T. Dunbar
Des Moines

Dear Sir: This piece makes my blood boil. When Shirley Abbott extends her picture of Hot Springs in the 1930s and '40s to other small towns in Arkansas she is presenting generalizations and rehashing stereotypes.

I too was born in Arkansas in the mid-'30s in a town that was also a county seat. It was even smaller—around 3,000. At least one black person owned a retail store—in the center of town—and his wife was a schoolteacher. Most of the people I remember spoke standard English, including my parents, who had grown up in a nearby town of only a couple of hundred. I never saw men standing around chewing and spitting.
Patricia Ellis Marti
Columbia, Maryland

Cormorants

Dear Sir: At $16,000 per winter night, the stated cost of cormorant depredations, it wouldn't take long to amortize a chicken-wire cage over the catfish beds. Other entrepreneurs protect their investments in similar fashion: "shade-grown tobacco" farmers with acres of netting, "free-roaming chicken" farmers with huge chicken-wire cages, fruit growers with bird netting.
Nancy Tatnall Fuller
Cheshire, Connecticut

Slime molds

Dear Sir: This past spring we laid untreated wood mulch from our city's

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mulch pile throughout a small wood on our property to make pathways. One evening we came across an eerie mass. Poking at it with sticks, our imaginations conjuring up gremlins and critters, we debated calling the county extension office but, afraid of looking foolish, blasted the thing with a water hose. We finally decided it had to be some type of fungus that had been in the mulch and were extremely relieved to find this weird life-form was actually the plasmodium of a slime mold.
Susan and David Holderman
Fostoria, Ohio

Luke Easter

Dear Sir: We loved Luke Easter in Buffalo. As the Bisons' historian Joseph M. Overfield put it, "Never in the city's sports history has an athlete made such an impact on the community."
Mark H. Dunkelman
Providence, Rhode Island

Dear Sir: Luke Easter had one more major-league home run than his baseball card indicates. Having just come up to the majors, Luke was loosening up on the on-deck circle, swinging several bats, one of which was a special, leaded warm-up bat. In the excitement of the moment, not realizing what it was, Luke carried the leaded bat to the plate and drilled a ferocious line drive into the stands. The umpire, noticing the loud clang and the velocity with which the ball cleared the fence, immediately knew what had happened. Luke was called out before he even got out of the batter's box.
Rich Lyman
Charlotte, North Carolina

Dear Sir: Luke and his wife, Virgil, owned the Luke Easter Sausage Company in Buffalo after his retirement. His picture appeared on the package, with the words "If you want to hit like Luke, you have to eat like Luke."
Mark L. Bernstein
Stony Brook, New York

Book reviews

Dear Sir: I, too, have been privileged in having a friend who is a rescuer of raptors. As a physician who treats human patients, I find it rather different to help Shirley Kendall put a feeding tube down the gullet of an eagle whose wingspread equals my reach with both arms outstretched. Especially when that magnificent creature has a compound fracture of its wing.

I cannot quite describe the feeling of releasing back into the wild a kestrel whose wounds have been healed by this remarkable woman.
Janice Lee Sperling
Albuquerque

Onethatgotaway

Dear Sir: This piece seems to be a complete put-down of millions of women who are excellent anglers. If written by a man, it would probably result in picketing by some feminist group.

My wife enjoys hunting and fishing as much as I do, and we've done both the world over, on several continents, many islands, many lakes, rivers, seas and oceans. She can cast and shoot as well as I.
Arthur L. Cone jr.
Williamsburg, Virginia

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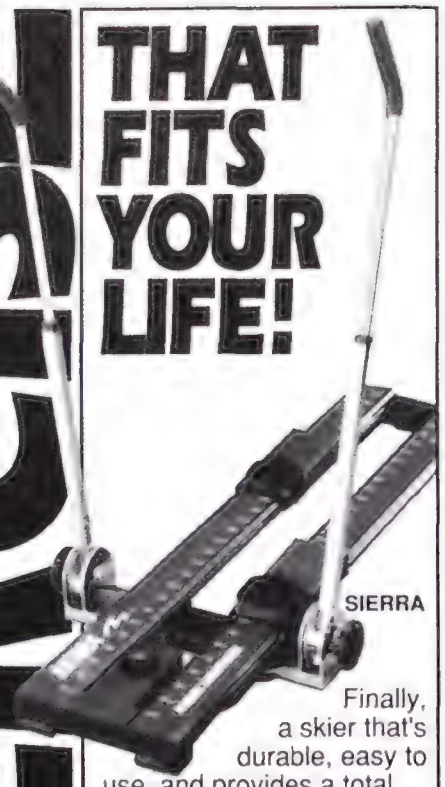

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The object at hand

In a Smithsonian exhibit Kicking Bear is labeled only as "Sioux Warrior."

A famed Sioux warrior-prophet named Kicking Bear, who died in 1904, is still much on view in Washington, D.C.

First the Smithsonian anthropologists lathered the Indian prophet's face with gelatin. They inserted straws in his nostrils for breathing. Then they wrapped his head with strips of cloth soaked in plaster. Throughout the ordeal of fashioning his life mask, Kicking Bear remained stoic. He raised his chin high, closed his eyes and struck a commanding pose no doubt familiar to the hundreds of warriors who had fought alongside him just five years earlier, in 1891, during the Sioux's last, desperate uprising against the U.S. Army.

Since that day, millions of Americans have also gazed at Kicking Bear's strong, inscrutable features. But few have realized it. For decades, painted in copper skin tones and framed by a black wig, Kicking Bear's head, molded from his life mask, has sat atop the figure of an Indian in a display case at the Smithsonian's National Museum of Natural History. Today, he is identified only as a "Sioux Warrior." The face is frowning slightly, perhaps as a lingering display of defiance by a great warrior, perhaps simply from discomfort at being half smothered in plaster.

Millions more, zipping up and down Rock Creek Parkway in Washington, D.C., have unwittingly seen Kicking Bear's face reproduced many times over, on the ornate bridge that spans Rock Creek Park at Q Street. Under each of the bridge's repeating stone arches, Kicking Bear looks down impassively on the traffic. The 56 heads, each with a stylized Sioux warbonnet, were fashioned from the Smithsonian's life mask in 1914 by sculptor A. Phimister Proctor.

Well before the turn of the century Mato Wanahtaka, "Kicking Bear," had become a famous man. He was born about 1847, the son of the chief of a band of Oglala Sioux. Kicking Bear was a warrior and medicine man, first fighting against rival Indian tribes, then, during the Indian Wars, against the U.S. Army. In his early days, he was notable not only as a warrior but also as an artist. In 1876, shortly after the Battle of Little Bighorn (SMITHSONIAN, June 1976), Kicking Bear painted a now famous pictograph of his role in the defeat

My brother-in-law built this place from scratch. It's part log cabin, part experiment in alternative energy. My favorite part is the way it smells. He's got a wood stove going all the time, so we spend hours chopping wood. It's hard work, but that ache in the muscles I never use is a one-of-a-kind feeling. I wonder sometimes if I could live like this. Someday, maybe. For now, though, I wouldn't miss my weekend visits to this corner of the world.

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p. 21: Where the daughter of

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of Lt. Col. George Armstrong Custer. This painting, now housed in the Southwest Museum in Los Angeles, shows Mato Wanahtaka, who has just killed an Arikara scout, joining Crazy Horse, his first cousin, to ambush an oncoming cavalry battalion.

Early in 1890, Kicking Bear achieved some national notoriety as a preacher of a new religion that the Sioux called *Wanagi Wacipi*, or "Ghost Dance." Sent to Nevada to investigate the new religion, he listened to its self-proclaimed messiah, a Paiute known as Wovoka, and returned to the reservation with a spiritual message: God would soon destroy the whites and revive the old ways. He would restore the buffalo, and reunite living Indians with their dead relatives. To insure the coming of this new world, Kicking Bear told believers, they must perform the Ghost Dance.

These were increasingly desperate times for the Sioux. Just 13 years after victory at Little Bighorn they faced a bleak future. So when Kicking Bear returned home in the spring of 1890, he found his people hungry for Wovoka's words. Eagerly they danced the Ghost Dance and sang a song that Kicking Bear composed for them:

Over the glad new earth they are coming,
Our dead come driving the elk and the deer.
See them hurrying the herds of buffalo!
This the Father has promised,
This the Father has given.

Many Sioux spent the summer and fall of 1890 listening to Kicking Bear and other "apostles." For days on end they abandoned their farm work and took their children out of school to dance the *Wanagi Wacipi*, praying and shouting and singing for the return of their lost world.

By midautumn, newspapers like the Rapid City *Journal* were printing lurid and totally incorrect stories predicting an imminent Sioux rebellion. After orders to stop the Ghost Dance had gone unheeded, soldiers were dispatched.

And thus began the tragic chain of events that led to Wounded Knee, the last major Indian battle fought in the United States. It was hardly a battle, of course. Many of the Sioux, unnerved by the appearance of several thousand soldiers, fled into the Badlands, where they quickly realized their cause was hopeless and prepared to surrender.

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p. 69: Proof that the Loch Ness Monster and the Big Bad Wolf really do exist.

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On Washington's Q Street bridge, his sculptured face appears 56 times.

What followed is a grim and oft-repeated story. On the morning of December 29, several dozen warriors and their families, surrounded by soldiers at Wounded Knee Creek, were in the process of giving up their rifles when a shot rang out. Who fired it is still a mystery. But within seconds both sides were shooting wildly. The Indian warriors, hopelessly outnumbered and trapped in an indefensible hollow, were mowed down by ranks of soldiers.

Kicking Bear and a band of 1,300 warriors were a few miles away. When they heard the crack of rifles and the boom of four Hotchkiss machine guns, which fired two-pound explosive shells, they were terrified—and angry. For the next 18 days, Kicking Bear led the last uprising of the Sioux. Though U.S. forces outnumbered them seven to one, the Sioux managed to stage several raids against isolated posts and Army columns, killing a few soldiers and inflicting minor damage. But the Sioux warriors and their 2,700 dependents had little food and no real shelter against the bitterly cold Dakota winter. On January 16, 1891, Kicking Bear and 3,500 starving followers surrendered. The brief, bloody war had cost the lives of more than 300 Indians, and 49 soldiers and government agents, most of the latter killed by their own comrades' crossfire at Wounded Knee.

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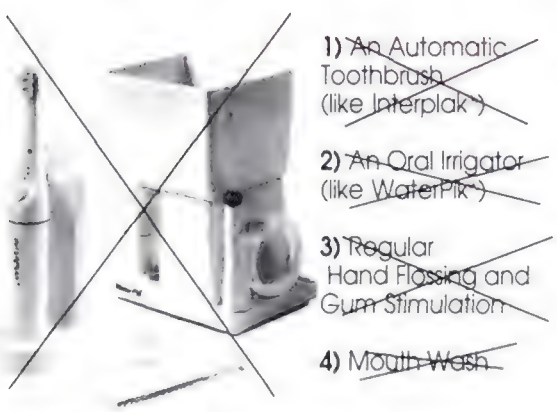

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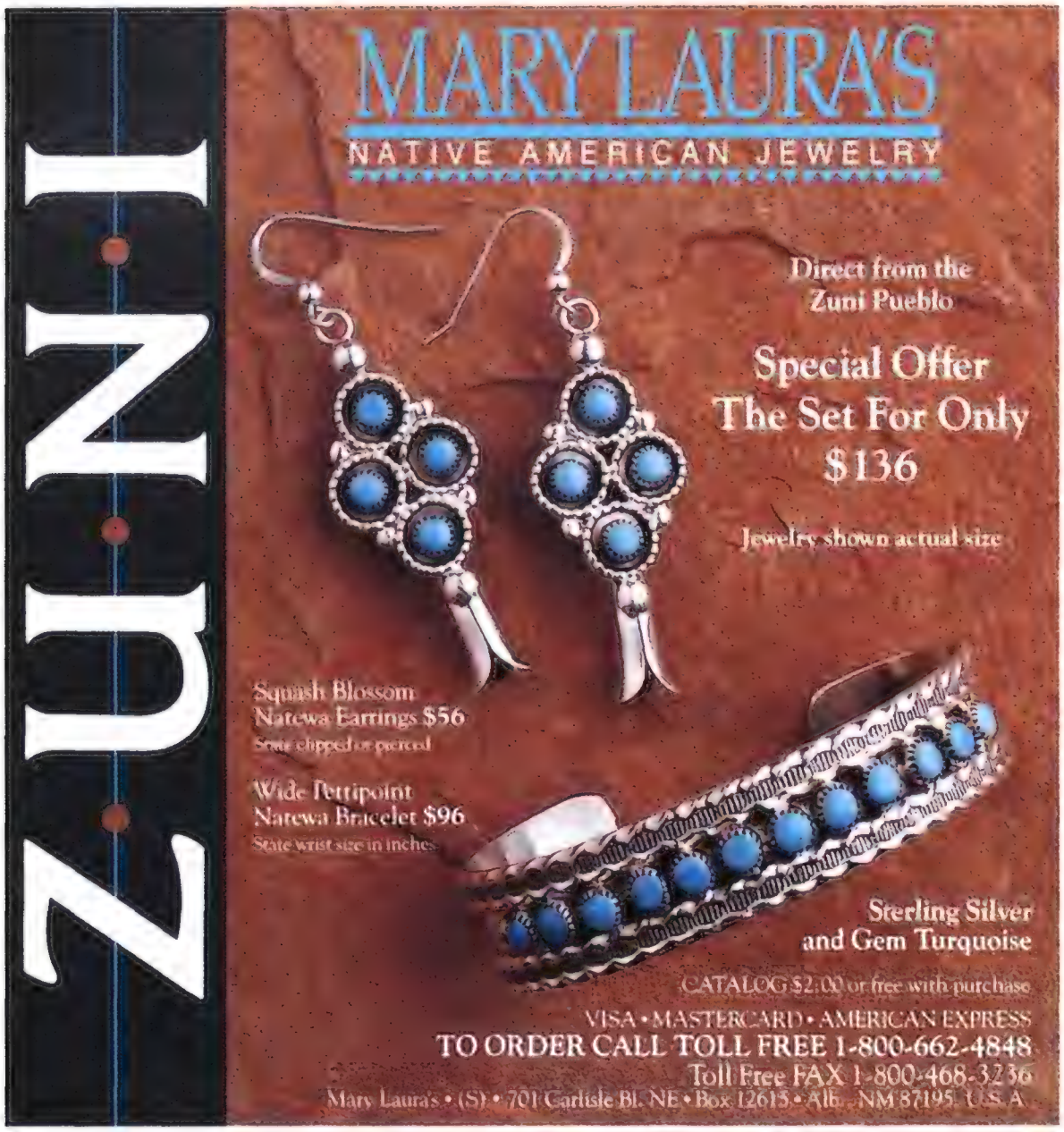
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ure topped by Kicking Bear's plaster head wore the warrior's own full-dress buckskin shirt, which he gave to James Mooney, Smithsonian anthropologist and Ghost Dance specialist, when Kicking Bear visited Washington in 1896. The figure also wore the Indian's own leggings, quill ornaments and tobacco pouch. It was only in the 1950s that the magnificent yellow-and-blue shirt decorated with strips of beads, hair and eagle feathers, deemed too fragile for display, was put in storage. At the same time, the Kicking Bear figure was moved to a new exhibit, where it ceased to be identified by name. Kicking Bear became simply the anonymous "Sioux Warrior" he is today.

Many figures in the Natural History Museum scenes are generic "types." But, like Kicking Bear, several were taken from the life masks of celebrated individuals. (At the turn of the century the museum was paying subjects from 50 cents to one dollar per sitting.) Thomas Kavanagh, a Smithsonian expert on Plains Indians, has been able to attach real names to a number of the plaster faces in the exhibit case. Among them: Rosa White Thunder, a young Sioux student whose face was cast in the 1880s at the Carlisle Indian School in Carlisle, Pennsylvania, and Two Guns White Calf, a Blackfoot chief; both share Kicking Bear's exhibit case.

Most of the figures are an outgrowth of a much larger collection, nearly 500 plaster life masks, busts and statues made between 1880 and 1920. Packed away in boxes are faces not only of native Americans, but of Africans, Polynesians, Asians, Europeans and even casual visitors to the Smithsonian, including a politician or two, and several anthropologists who apparently "plastered" one another.

The original purpose of the masks, as G. Brown Goode wrote in 1895, was to "show the characteristics of the different races . . . display costumes . . . and to illustrate the methods and use of weapons." It was a time when physical anthropologists were busy collecting and measuring all sorts of specimens and trying to compare a diversity of races. Whatever the reason, the museum stopped making life masks in the 1920s. Since then, no one has quite known what to do with them, though recently the Smithsonian and other museums around the country have used the masks to serve as models for new displays.

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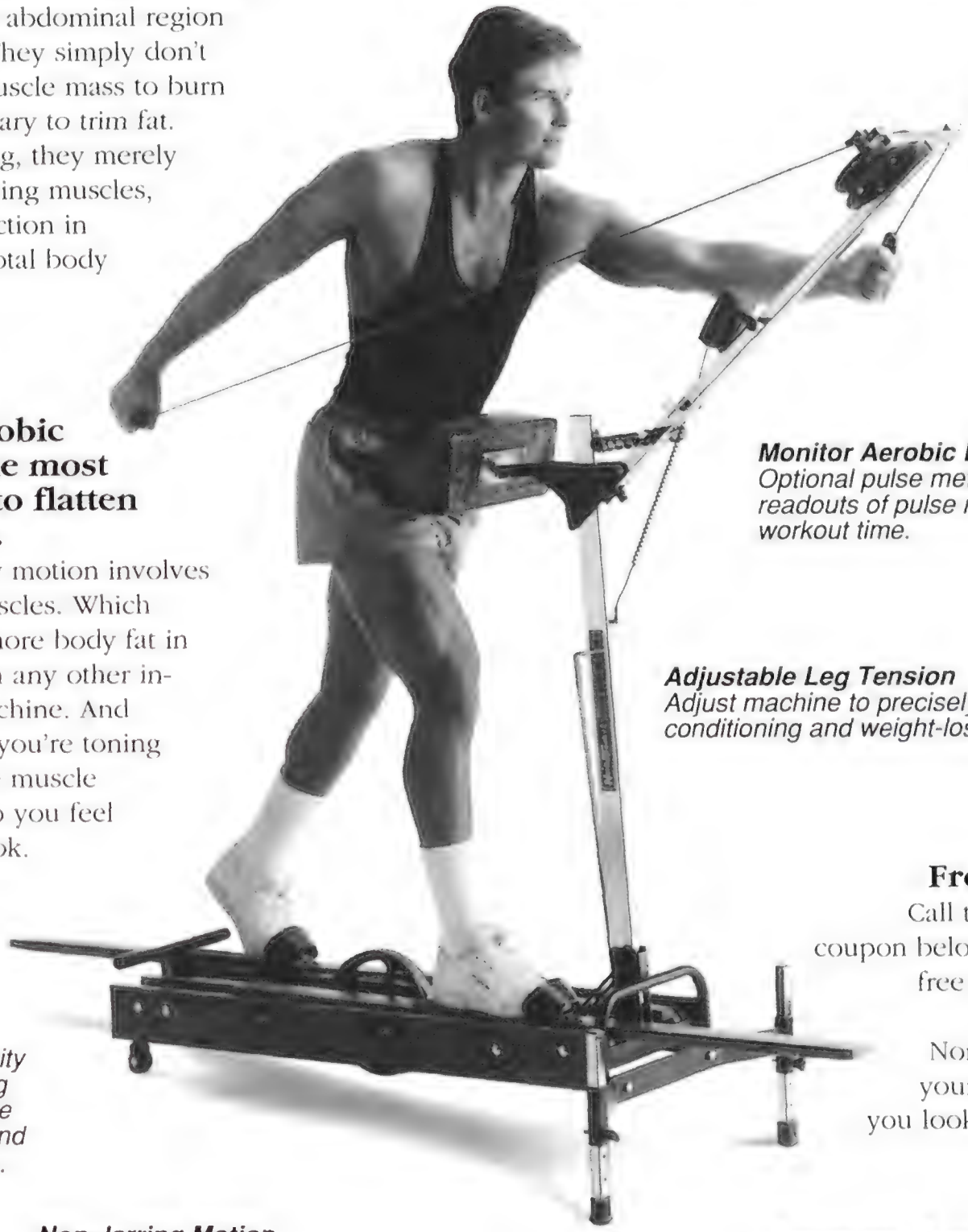

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In a detail from his Little Bighorn painting, Kicking Bear wears green shirt, carries rifles and fresh scalp.

Kicking Bear was chosen as the subject of a life mask because of his fame, for neither his prominence among the Sioux nor his personal religious quest ended with surrender in 1891. After several months as a prisoner at Fort Sheridan near Chicago, he was freed to tour Europe with Buffalo Bill Cody's Wild West show. When anthropologists fashioned his life mask in March of 1896, he happened to be in Washington, D.C. as one of three delegates taking Sioux grievances to the Office of Indian Affairs.

Transcripts from the Indian Affairs meetings the week of March 4, 1896, show that he respectfully chastised the commissioner about white traders who got "drunk and foolish" on the reservation, and asked that Indians have more leeway to make their own decisions.

Soon after his Washington visit he turned up in Montana as a Presbyterian missionary, preaching, among other things, the story of Jonah and the Whale. But by 1902 he had abandoned Christianity and was teaching new converts the ways of the Ghost Dance again.

Before Kicking Bear died, he went out to the grave of his father, Black Fox, lifted Black Fox's skull from its resting place and dislodged the Crow arrowhead that had killed him. When Kicking Bear, one of the last of the Sioux fighting men, died in 1904 at the age of 58, he was buried with this arrowhead, a symbol of the lost world he had longed so passionately to resurrect.

David Ewing Duncan

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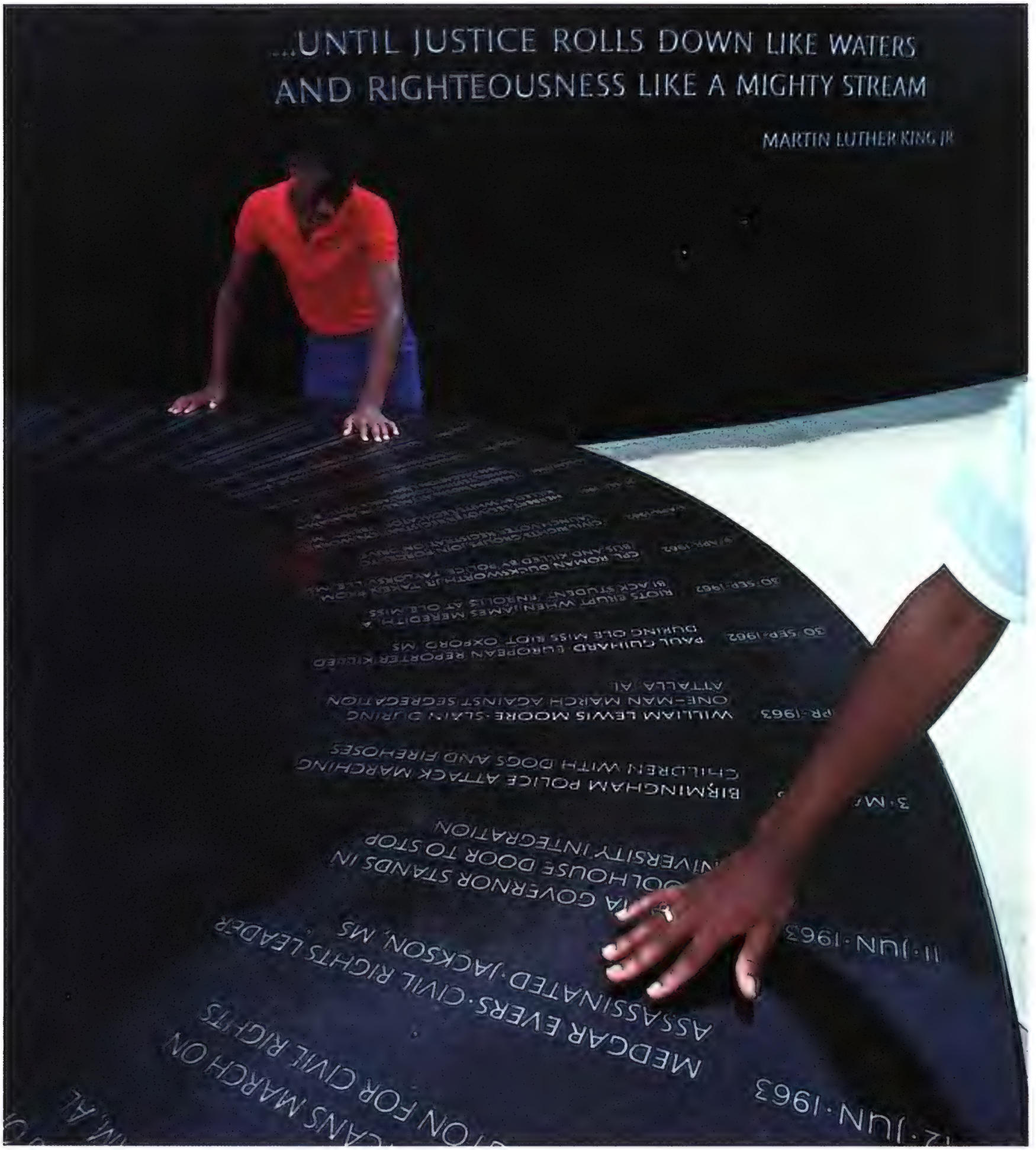
By William Zinsser

'I realized her tears were becoming part of the memorial'



In Montgomery, Alabama, where Martin Luther King led his church in nonviolent activism, a monument reminds us of the long struggle

Maya Lin, who designed the Vietnam Memorial when she was a 21-year-old senior at Yale, is now an architect in New York, and when I happened to meet her one day I asked her about her recent work. She told me about her Civil Rights Memorial at the Southern Poverty Law Center in Montgomery, Alabama, which was dedicated in the fall of 1989. The monument, she said, is of black granite and takes as its text a paraphrase of a verse in the Book of Amos that was spoken on two historic occasions by Martin Luther King jr.: "We will not be satisfied until justice rolls down like waters and righteousness like a mighty stream." Its central idea is that water flows over those words and also over the names—incised in the stone—of 40 men, women and children who were killed during the civil rights movement. Like her Vietnam Memorial, it invites visitors to touch the names and thereby bring some part of themselves to the act of honoring the dead and of not forgetting what they died for.

I had never heard of the memorial. Nor had I ever stopped to think that in a land strewn with heroic statuary there had been no statue commemorating the heroism of the struggle for civil rights. Montgomery was, of course, the inevitable site—a place waiting for a monument to happen. It was not only where Rosa Parks, by refusing to give up her seat in the "whites only" section of a bus, inspired the 13-month Montgomery bus boycott that gave the movement its irreversible momentum. It was also where an old black congregation and its new young pastor—the Dexter Avenue Baptist Church and Martin Luther King jr.—together set in motion a program of nonviolent activism that neither of them could have created alone and that grounded their cause in the oldest Christian teachings. If I wanted to see the new memorial (and I did), I also wanted to see the old church. Granite or brick, they were cut from the same stone.

"In the spring of 1988," Maya Lin recalled, "the Southern Poverty Law Center contacted me and asked me if I'd be interested in designing a civil rights memorial. I thought surely one had already been done. But there had only been very specific monuments to specific people; no memorial existed that encompassed the movement itself and caught what that whole era was about. It had been very much a people's movement—many people gave their lives for it, and that had been largely forgotten."

Architect Maya Lin designed the memorial at request of the Southern Poverty Law Center in Montgomery.

His hands soothed by a sheet of continuously flowing water, a youngster studies the text of the memorial.

The Center sent Lin some books and tapes about the civil rights era and about the Ku Klux Klan and other hate groups that had reemerged in the South. "I didn't know what the Center was," she recalled, "until I started to read these stories—especially the story of Michael Donald, a black teenager who was lynched by the Klan in 1981. I found out that the Center had brought a suit that not only convicted one man for murder but that broke the entire Klan faction, making the point that the group is responsible for the actions of the individual. So I admired what they were doing and I agreed to design the memorial, which would occupy the plaza in front of their building. I was also horrified to realize that many of these murders had taken place during my lifetime and that I didn't know about them; it hadn't been taught to me in school—the case of Samuel Younge jr., for instance, a student who was killed in 1966 following a dispute over a 'whites-only' bathroom. And I thought, if you stop remembering, you can quickly slide backward into prejudicial ways."

Photographs by Richard Howard

Thirteen who died in the struggle

Clockwise from top left: Addie Mae Collins, Denise McNair, Carole Robertson, Cynthia Wesley; Birmingham, Alabama, 1963

Emmett Louis Till; Money, Mississippi, 1955

Medgar Evers; Jackson, Mississippi, 1963

Virgil Lamar Ware; Birmingham, Alabama, 1963

The Rev. Bruce Klunder; Cleveland, Ohio, 1964
Jimmie Lee Jackson; Marion, Alabama, 1965
Viola Gregg Liuzzo; Selma Highway, Alabama, 1965

Samuel Younge jr.; Tuskegee, Alabama, 1966

Vernon Dahmer; Hattiesburg, Mississippi, 1966

Ben Chester White; Natchez, Mississippi, 1966

Lin spent several months doing research and just thinking about the civil rights movement, "waiting for a form to show up." Finally the day came for her to fly to Montgomery to inspect the site, which she hadn't yet seen, and it was on the plane, reading a book called *Eyes on the Prize*, that she encountered the phrase about justice rolling down like waters.

"The minute I hit that quote I knew that the whole piece had to be about water," she told me. "I learned that King had used the phrase not only in his famous 'I have a dream' speech at the Washington civil rights march in 1963 but at the start of the bus boycott in Montgomery eight years earlier, so it had been a rallying cry for the entire movement. Suddenly the whole form took shape, and half an hour later I was in a restaurant in Montgomery with the people from the Center, sketching it on a paper napkin. I realized that I wanted to create a time line: a chronological listing of the movement's major events and its individual deaths, which together would show how people's lives influenced history and how their deaths made things better."

What she didn't anticipate was the power that words joined with water would generate. "At the dedication ceremony," she said, "I was surprised and moved when people started to cry. Emmett Till's mother was touching his name beneath the water and crying, and I realized her tears were becoming part of the memorial."

The idea came from Morris Dees

Morris S. Dees, cofounder and executive director of the Southern Poverty Law Center, and the person who conceived the memorial, is a rangy man of 54 with curly blond hair and amused eyes, and when I met him at the Center's new building in downtown Montgomery—its previous building was burned down by the Klan—I wasn't surprised to learn that he had been the subject of a recent made-for-television movie called *Line of Fire*, with Corbin Bernsen of *L.A. Law* as the crusading attorney. I recognized him as a familiar American type—the maverick idealist—from dozens of Hollywood movies made in a more guileless era. He was Jimmy Stewart cleaning up the mess on Capitol Hill in *Mr. Smith Goes to Washington*. He was Gary Cooper in *High Noon* and Joel McCrea in *Sullivan's Travels*.

Dees is from a family that has farmed in Montgomery County since before the Civil War. "My parents owned a small cotton farm," he said. "They treated blacks differently from the way most white people around here did. They weren't liberals or integrationists; they were just fair-minded folks."

As a sideline in his college days, Dees formed a book-publishing company so prosperous that in 1969 he sold it to the Times Mirror Company in Los Angeles, thus becoming financially independent, and when he graduated from the University of Alabama law school he began to take cases brought to him by blacks who were excluded from jobs because of their color. One case involved a man who wanted to become a state trooper but wasn't permitted to apply. Dees' suit resulted in the integration of Alabama's state trooper system—"one of the first hiring ratios in public service in the United States," he says.

In 1971, Dees and his partner, Joseph J. Levin jr., changed the sign on their law office from Levin & Dees to the Southern Poverty Law Center, incorporating themselves as a nonprofit entity. As Klan killings and violence intensified in the late '70s, Dees began to represent the victims or their survivors. He also formed a unit of the Center called Klanwatch, which monitors white supremacist groups. In this role Dees took the case of Michael Donald, a 19-year-old black youth who, in 1981, was on his way to a store when Klansmen abducted him, beat him, cut his throat and hung him from a tree on a residential street in Mobile. Dees' suit led to one verdict of murder, one indictment of a Klansman who is awaiting trial, and a $7 million jury award in 1987 that put one entire faction of the Klan out of business.

"The main thrust of our work is educational," Dees told me. "It's not just lawsuits. We want to stop the problem by educating people, especially young people. After that jury award I was invited to address the NAACP convention in Mobile, and I said that one day people would speak the names not only of Martin Luther King and Medgar Evers, but of Emmett Till and Viola Liuzzo and Jimmy Lee Jackson and many other martyrs of the movement. Afterward, a black teenage boy came up to me and said, 'We heard you talk about those people who died for freedom, and we know about Dr. King, and we know about those four little girls who were bombed in that church in Birmingham. But who was Emmett Till? And who was Medgar Evers?'

"I turned to the other boys who were with him, and I said, 'Can any of you tell me who Medgar Evers was? Or Viola Liuzzo?' Not a single one of them knew. Yet these young blacks can enjoy the rights won by those people who died. And white people would know even less. As I drove home I made a vow that I would do research to find out who had died, and that we would build a monument to them. Back at the Center, everybody liked the idea, and someone said, 'If we're going to do it, let's get a first-rate architect.' And Ed Ashworth, one of our board members, said, 'Let's get Maya Lin.' So we called every Lin in the

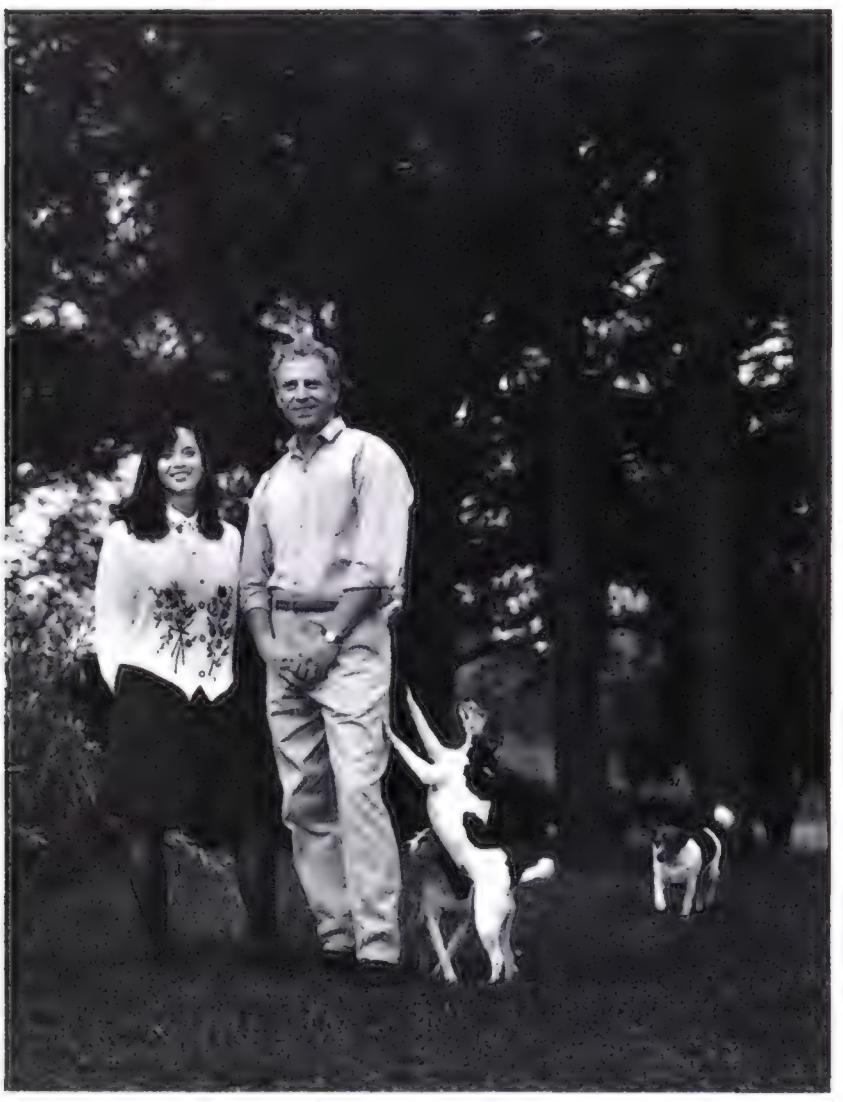
William Zinsser, author of On Writing Well, *is completing a book about iconic American places, due next spring from HarperCollins.*

New York telephone book until the right one answered."

"As soon as you talk about putting names in granite you create a lot of problems," said Sara Bullard, the Center's director of research and author of its book, *Free At Last: A History of the Civil Rights Movement and Those Who Died in the Struggle*, which has been sent to nearly all of America's junior and senior high schools. The book is a model of clear writing, taking its power from the simple recitation of events almost too terrible to believe: beatings, bombings, burnings, ambushings, shootings and lynchings.

"We needed some guidelines to help us choose the people who would go on the memorial," Bullard said, "and we finally decided that we would start with the 1954 Supreme Court decision, *Brown v. Board of Education*, which banned segregation in public schools, and end with the assassination of Martin Luther King in 1968—realizing, of course, that the movement didn't have that clean a beginning or an end. In fact, as I started my research I realized there were many significant deaths that fell outside our boundaries."

Her research didn't start well. "I went to Tuskegee Institute and looked through its lynching files," Bullard recalled. "We figured that a resource that big and famous would have everything we needed to know about who should be on the memorial. Well, it turned out that those files included all blacks who had ever been executed under capital punishment laws. That would have put us in the position of deciding who was innocent or guilty, because there was almost never enough information about the circumstances of the death or the motive of the killer: why these people were killed and who they were killed by."



Morris Dees, here with wife, Elizabeth, is executive director of SPLC and conceived idea of the memorial.

Three criteria for choosing the names

"In the end," Bullard continued, "we established three criteria for including people on the memorial. One was that they were killed because of their own nonviolent civil rights activism. Typically, these were men and women like Vernon Dahmer, a black businessman in Hattiesburg, Mississippi, who offered to pay the poll tax for anyone who couldn't afford the voting fee—he was killed when his home was firebombed—or Viola Liuzzo, a white housewife and mother from Detroit who was shot by Klansmen for driving freedom marchers back to Selma from Montgomery.

"Our second criterion was: people who were killed by agitators trying to stir up opposition to the movement or throw some obstacle in its path. These tend to be the lesser-known victims—for example, Virgil Ware, a 13-year-old Birmingham boy who was shot while riding on the handlebars of his brother's bicycle by white teenagers coming back from a segregationist rally; or Ben Chester White, a caretaker in Natchez who was shot by Klansmen who wanted to divert attention from a civil rights march; or the four young girls—Addie Mae Collins, Denise McNair, Carole Robertson and Cynthia Wesley—who were killed by the bomb that exploded in the 16th Street Baptist Church in Birmingham, which had been a center for civil rights meetings.

"The third criterion was: people whose death created momentum for the movement—whose death was used by civil rights groups as a tool to show the nation the conditions that Southern blacks lived under and the injustices they suffered. The death of Emmett Till, for instance—a 14-year-old boy killed for speaking to a white woman in Mississippi—was the first death that brought wide support from outside the South. Or Jimmie Lee Jackson, who was shot by Alabama state troopers for trying to protect his mother and his grandfather from a trooper attack on voting rights marchers. His death changed the entire course of the movement. It inspired the Selma-to-Montgomery march and eventually led to the passage of the Voting Rights Act."

But finding the names wasn't easy. "A big problem was that newspapers in the South didn't cover these deaths," Bullard said. "My best source turned out to be

Contractor Ken Upchurch (right) learned a lot about civil rights movement while installing monument.

SPLC research director Sara Bullard unearthed names and histories from a variety of sources in the South.

the Southern Regional Council, in Atlanta, a group that does research and education on issues of poverty and civil rights. One of its categories was 'Violence and Intimidation.' The cardboard cartons containing those files had been stored in the basement, under a Korean grocery store—a place with a lot of dripping water. I spent a week in that basement and would come out at the end of the day looking like a coal miner. But I found names that hadn't turned up anywhere else, and one name led to another—people like Clarence Triggs, a bricklayer who was shot by the roadside for having attended meetings sponsored by the Congress of Racial Equality, or Bruce Klunder, a white minister who tried to block the construction of a segregated school in Cleveland."

After much debate, 40 names were chosen for the memorial. "The message that we try to convey," Bullard said, "is simply: 'This memorial represents the sacrifices of ordinary people during the civil rights movement. Here are some of those people.' "

The Civil Rights Memorial was designed to serve as the entrance plaza for the Southern Poverty Law Center's new headquarters, a small building with a handsome interplay of angles and glass. The memorial has two components, both of black Canadian granite. The first part is a nine-foot-high wall, on the face of which are carved the words:

> . . . until justice rolls down like waters
> and righteousness like a mighty stream
> —Martin Luther King jr.

Water spills down the wall at waterfall speed. Although the passage from the Prophet Amos as paraphrased by King actually begins with "We will not be satisfied," Maya Lin told me that she started where she did because the word "until" catches the second purpose of the monument. "Unlike the Vietnam Memorial, which covers a specific period of time that's over," she said, "I wanted the Civil Rights Memorial to deal not only with the past but with the future—with how far we still have to go in a continuing struggle."

The second part of the memorial, resting on an asymmetrical pedestal nearby, is a circular tabletop, almost 12 feet in diameter. Around its perimeter, incised in the stone, somewhat in the manner of a sundial, are 53 brief entries, chronologically arranged. Twenty-one of them report landmark events in the movement:

> 13 Nov. 1956
> Supreme Court bans segregated
> seating on Montgomery buses
>
> 30 Sep. 1962
> Riots erupt when James Meredith,
> a black student, enrolls at Ole Miss
>
> 28 Aug. 1963
> 250,000 Americans march on Washington
> for civil rights
>
> 20 June 1964
> Freedom summer brings 1,000 young
> civil rights volunteers to Mississippi

The other entries describe 40 individual deaths:

> 7 May 1955
> Rev. George Lee. Killed for leading
> voter registration drive. Belzoni, MS

Mamie Till Mobley, mother of Emmett Till, shot to death at age 14, attended memorial's dedication along with 600 relatives and friends of others it names.

21 June 1964
James Chaney. Andrew Goodman. Michael Schwerner. Civil rights workers abducted and slain by Klan. Philadelphia, MS

20 Aug. 1965
Jonathan Daniels. Seminary student killed by deputy. Hayneville, AL

27 Feb. 1967
Wharlest Jackson. Civil rights leader killed after promotion to 'white' job. Natchez, MS

4 Apr. 1968
Dr. Martin Luther King jr. Assassinated. Memphis, TN

Extra space after King's entry shows that this is where the story ends on the memorial. It also therefore shows where the story begins—on May 17, 1954, the Supreme Court's *Brown* decision—and that's where most visitors start their visit, walking slowly around the table and touching the names beneath the water, which arises from a hole in the tabletop and flows over it evenly. The table is only 31 inches high, deliberately accessible to children.

"The water is as slow as I could get it," Maya Lin told me. "It remains very still until you touch it. Your hand causes ripples, which transform and alter the piece, just as reading the words completes the piece. The sound of the water is also very calming. Sound is important to me as an architect."

Installing the Civil Rights Memorial put the contractor, Ken Upchurch, through some unusual moments. "All along we were concerned about vandalism," he recalled. "Feelings about Morris Dees run high in this city, so we put a white construction fence around the site. But not a single mark was ever put on that fence. Morris said from the beginning that the memorial was a teaching tool, and in the case of my men he was right: it has already achieved that goal. Though all of us grew up in Montgomery, we learned more about the civil rights movement by doing this job than we did by growing up here. Everyone on the crew saw that their problems were minor compared to the problems of the people named on the table."

Ken Upchurch's company was founded by his grandparents in 1930. "My grandfather built our business on doing jobs that nobody else was willing to do because they were too risky. He prided himself on that, and *I've* always been proud that in 60 years we've never finished a job late." That record appeared to be in serious trouble as the granite fabricator in Vermont kept fussing with the tabletop. Finally word came that the piece would arrive on a Saturday morning in October, just two weeks before the dedication. Nobody knew whether it would fit or whether the water would work properly.

"We got to the site early to wait for it," Upchurch told me, "and around 9 A.M. a flatbed truck drove up with this 15-ton slab of granite. The driver was a black woman and her assistant driver was a white woman. We had sent precise instructions on how the granite should be loaded onto the truck so that we would be able to take it off without damaging it—it's only one inch thick at the edge—and right away we saw that

there was a problem: the lifting device was attached upside down. We sat around for several hours trying to figure out what to do. In the end there was nothing to do but swing it into the air with our crane and turn it over and set it down on the base.

"The bolt holes had also been put in the wrong place, so we had to drill new ones and get everything braced, and by that time it was almost 10 o'clock at night and the crowds that had been there all day long had gone home, including Morris Dees and the people from the Center. Only my men were left. Someone said, 'Should we turn on the water?' We thought maybe we should wait until Monday. But someone else said, 'We've been working for two years to get to this point—let's turn it on!' So we did, and the water worked *perfectly*. And just at that moment Morris Dees came back. He had been too fidgety to wait at home. I'll never forget the look on his face when he saw the water flowing over those names."

Two weeks later almost 600 members of the families of the men, women and children named on the memorial assembled to take part in the dedication. They came from all over the country—grandparents and parents, sons and daughters, brothers and sisters, uncles and aunts, cousins and babes in arms. Except in a few cases, none of the families had ever met, but they shared the same piece of American history. Trying to reconstruct that weekend, I talked to the van driver at the Madison Hotel, who brought many of them from the airport.

"It was sad the way they talked about what had happened," Leroy Terrell (above) told me, "and when you think about it, it *was* sad. There was a lot of crying. I realized that quite a few of those men and women had been very young children when their father or mother died. One white lady from Michigan said she had only been 5 or 6 years old when her mother was killed near Selma." That white lady would have been Viola Liuzzo's daughter, Sally Liuzzo Prado.

Airport shuttle driver Leroy Terrell was moved by stories of people who came to attend the dedication.

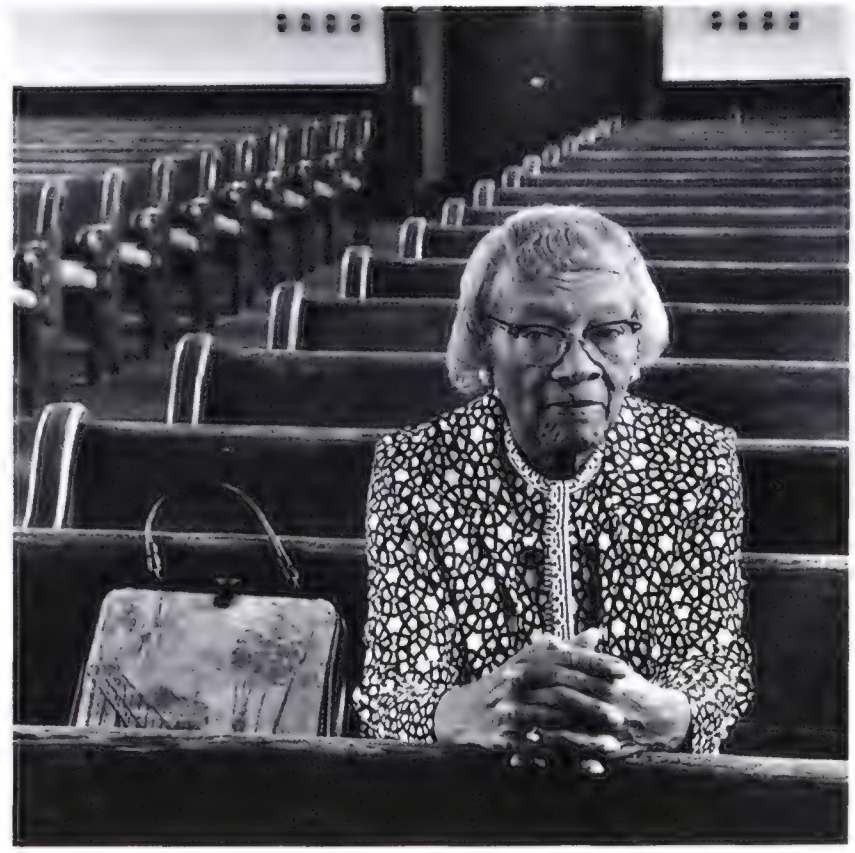
Songs, prayers, speeches and recollections

Later I watched videotapes of the weekend's two main events. One was a banquet on Saturday night. The other was the dedication on Sunday afternoon, November 5, 1989, when the families were joined by several thousand spectators, densely packed along the street, to hear songs, prayers, speeches by survivors like Rosa Parks, and brief recollections of the long-lost children by white-haired parents. What struck me about all the speakers was the natural eloquence of their language.

Mamie Till Mobley, mother of Emmett Till: "We are men and women of sorrow, and we are acquainted with grief. But we sorrow not as those who have no

Chris McNair, whose daughter died in church bombing in Birmingham, is now a county commissioner there.

Deacon Addre Bryant stands on the steps of Dexter Avenue Church, where Martin Luther King was pastor.


Zelia Evans, the church historian, remembers when King first led congregation in nonviolent activism.

hope. We know that we were chosen to be burden bearers. Emmett's death was not a personal experience for me to hug to myself and weep. It was a worldwide awakening that would change the course of history. With these hurts have come additional responsibilities. We cannot afford the luxury of self-pity."

Chris McNair, father of Denise McNair, one of the four young girls who were bombed in church: "Our daughter Denise, if she had lived, would be celebrating her 38th birthday next month. When Denise was in seventh grade and everybody in Birmingham was marching and going to jail, Denise said to her mother and cousin one evening, '*I* want to march!' They both admonished her, saying, 'Denise, you're too little.' Denise, being very fiery, turned to them and said, 'If I'm too little, *you're* not too little and *you're* not free. Why aren't *you* marching?' She never got an answer."

As an outdoor monument, the Civil Rights Memorial never closes, and for two days and evenings I watched people stopping by to see it. Adults came in tour buses, children came in school buses, and the rest came by car or on foot. "The memorial has greatly increased tourist interest in Montgomery," I was told by Katie Ufford, director of the city's visitors center. "We're getting many tourists from the North and from the West, and the black population in the South all want to see it. They also want to visit Dr. King's church, and sometimes they tie it all in with a trip to Selma and Tuskegee."

Until recently Montgomery has been a tourist site primarily for Southerners and historians, as the first capital of the Confederacy and the place where the Civil War began—the order to "reduce" Fort Sumter was sent from a telegraph office on Dexter Avenue—and as the site of the first White House of the Confederacy, a white Italianate house where Jefferson Davis, the president of the Confederate States, lived with his family, starting in 1861. Its location, when I went around to see it, struck me as piquant: it's two blocks up Washington Street from the Civil Rights Memorial and just up the hill from King's Dexter Avenue Baptist Church. All three coexist in the shadow of the state Capitol, an august white-domed edifice that has on its flagpole, in descending order of pertinence, the American flag, the Alabama flag and the Confederate flag. I recognized Dexter Avenue from newsreels of the '60s: a broad thoroughfare that terminates at the Capitol steps. The Selma-to-Montgomery march ended there. So did Jefferson Davis' Inaugural parade.

I went into the Dexter Avenue Church, a modest red-brick structure not unlike Baptist churches in many Southern towns, and introduced myself to its presiding deacon, Addre Bryant. The church, which was completed in 1889, is now a National Historic Landmark, and Bryant told me that it gets a large number of visitors every Sunday from all over the world—"they want to be part of the worship service." On weekdays, tourists enter through the basement and are shown a mural depicting memorable events in Martin Luther King's 14-year odyssey from Montgomery to Memphis.

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The march from Selma to Montgomery, Alabama, in 1965 led to passage of the Voting Rights Act. Many participated in response to the shooting death of Jimmie Lee Jackson during an earlier demonstration.

From there visitors go upstairs to the church itself, a sunny interior with pale blue walls and stained-glass windows in a pattern of bright checkerboard squares. "That's always a silent, solemn period," Deacon Bryant said. "They sit in the pews and meditate. The Civil Rights Memorial has brought far more visitors to the church. There's sort of an unwritten partnership between the two—the memorial has sanctioned what the church did during the movement. Younger people especially don't understand the hardships that American blacks endured at that time."

We were joined by Zelia Evans, who, though not an elder of the church, is surely its elder stateswoman, having written its history in 1977, at the age of 75. Evans first attended the church as a high school girl, and in the second half of her 44-year teaching career she was a professor of education at Alabama State University, the local college whose black presidents, faculty and students, along with other black professionals, gave the Dexter Avenue Church its reputation as a "silk stocking" congregation, intellectually rigorous and impatient with emotional religion.

"It was good that Martin Luther King came to a church that was trained to accept his kind of work and that could give him the endorsement he needed," Evans said, although, she recalled, one parishioner asked, "Why did they bring that *boy* here?" (King was 25 at the time.) "Dr. King took the Bible and made it so that you could just *see* it, because of the clarity and the depth of his teaching, and then he always *charged* you to apply it. Teaching was his work just as much as preaching was. Of course that was also true of Jesus. I guess it was the movement of the Lord to call the congregation to call him here."

Walking back up to the Civil Rights Memorial, I thought of how often the words "teaching" or "education" had been woven through my visit. Earlier I had asked Maya Lin whether anything about the memorial—perhaps the stillness, perhaps the water—reflected her heritage as a Chinese-American woman. "If it's Eastern in any way," she said, "it's not because it's Zen, or Buddhist, but because it's a teaching device. It presents information and lets the viewer interpret it, unlike Western art, which tends to be didactic.

"I remember that I designed the Vietnam Memorial for two different clients. First, it was for all the people who had been involved in the war. But it also had to work 100 years from now. It had to say that the losses were immense, the price was too high. The Civil Rights Memorial has that same historical purpose. It's an educational piece. Viewers are moved less by the stories of the individual men and women than by what was done to them. The memorial touches the surface; *then* you go and find out more about the period."

What I saw when I got back to the memorial, however, was something that went beyond teaching and learning. Because of the monument's circularity, tourists were having an experience that was both private and shared. Moving around the black-granite table, pausing to read and touch the names of the dead, they were also in touch with one another—literally, or in fragments of conversation, or in silent witness. Sometimes there were so many tourists that they formed an almost complete circle. At other times, nobody was

there. The memorial moved to its own found rhythms.

Late in the day I saw a black woman with a video-camera filming three people who were standing over the table. One was a black man, evidently her husband; the other two were an older white couple. The white man walked with two canes and pulled himself laboriously around the table, reading every entry. All four had the ease of old friends, and I asked the black woman if they were traveling together. "No, we just met," she said. "We got out of our cars at the same time."

After a while she and the black man went back to their car. The day had turned cold, and only the white man and his wife were left. I asked them where they were from. He said that they were Sam and Hyla Offen, from West Bloomfield, Michigan, and that they knew about the memorial because of Viola Liuzzo, who was from the same area. Normally when they drive to Florida, he said, they take Route 75 and go by way of Atlanta, but this time they were so eager to see the memorial that they made a special detour.

"I'm a Holocaust survivor," Sam Offen told me, "so naturally I empathize with this monument. I was born in Poland, and I never saw a black person until after the war. Right away I saw that they're just people, like everybody else, and Hyla and I have supported the cause ever since we came to America."

"What cause?" I asked, though I knew the answer.

"Liberty for all," he said. "I was deprived of liberty for five and a half years, so I know exactly what it's like to lose it."

Around dusk, when everyone else had left, a young black man drove up in his car, got out and spent about 15 minutes at the memorial, reading the names and taking photographs of the biblical words behind the falling water in the failing light. When he had finished I asked if he was from Montgomery. He said he was from Atlanta, and that he was a field engineer for a telephone company.

"I told my boss that if a project ever came along in the Montgomery area I hoped he would send me, because I've really wanted to see this monument," he said. "A job came up this morning and I've just finished. As a young black man this place makes me realize the sacrifices that all those people made so that I could have a good job today. Back in the '60s a job like mine would have been totally impossible."

Moving in a slow circle, visitors to the memorial follow the chronology of 14 years of the civil rights movement—from the landmark *Brown v. Board of Education* decision to death of Martin Luther King jr.

By William Severini Kowinski

Is Wegman an artistic comic or a comic artist?

Or doesn't it matter? His humor breaches our boundaries, showing how flimsy our labels and elaborate classification schemes really are

As a boy, he had stared for hours at the wallpaper in his room, not only fascinated with the scenes it depicted—pirates, ships, seagulls and the sea—but also perplexed by how the sails could poke beyond the boundaries of the picture, like a photograph exceeding its frame, or like coloring outside the lines.

Since those childhood reveries in the early 1950s, William Wegman has poked beyond a variety of boundaries, producing photographs, videos and drawings that apply deadpan humor to both high art and popular culture, while expanding and exploring the potential of each medium. In the process, he also routinely crosses the borders between an influential career in the art world and recognition by a larger audience. Not bad for a quirky conceptualist who could have easily been seen as too goofy to be taken seriously and too much the arcane artist to have popular appeal. Except for his forays into performance art, the full panoply of Wegman's work is represented in his first retrospective exhibition, now beginning its tour of America after a year in Europe. "Paintings, Drawings, Photographs, Videotapes" is on view at the Institute of Contemporary Art in Boston through October 6. It will then travel to the John and Mable Ringling Museum in Sarasota, Florida (November 8 to January 5, 1992) and the Whitney Museum of American Art in New York (January 23-April 19) before its final stop at the Contemporary Arts Museum in Houston (June 6-August 16). The exhibit of more than 160 works originated at the Kunstmuseum Lucerne in Switzerland and continued on to London, Amsterdam, Frankfurt and Paris.

Wegman's videos are known for innovation in that fledgling medium, and his photographs are highly regarded in a form that only recently has been accepted as art. But in an irony that Wegman himself appreciates, it is his work in the traditional medium of painting that is likely to be the most controversial.

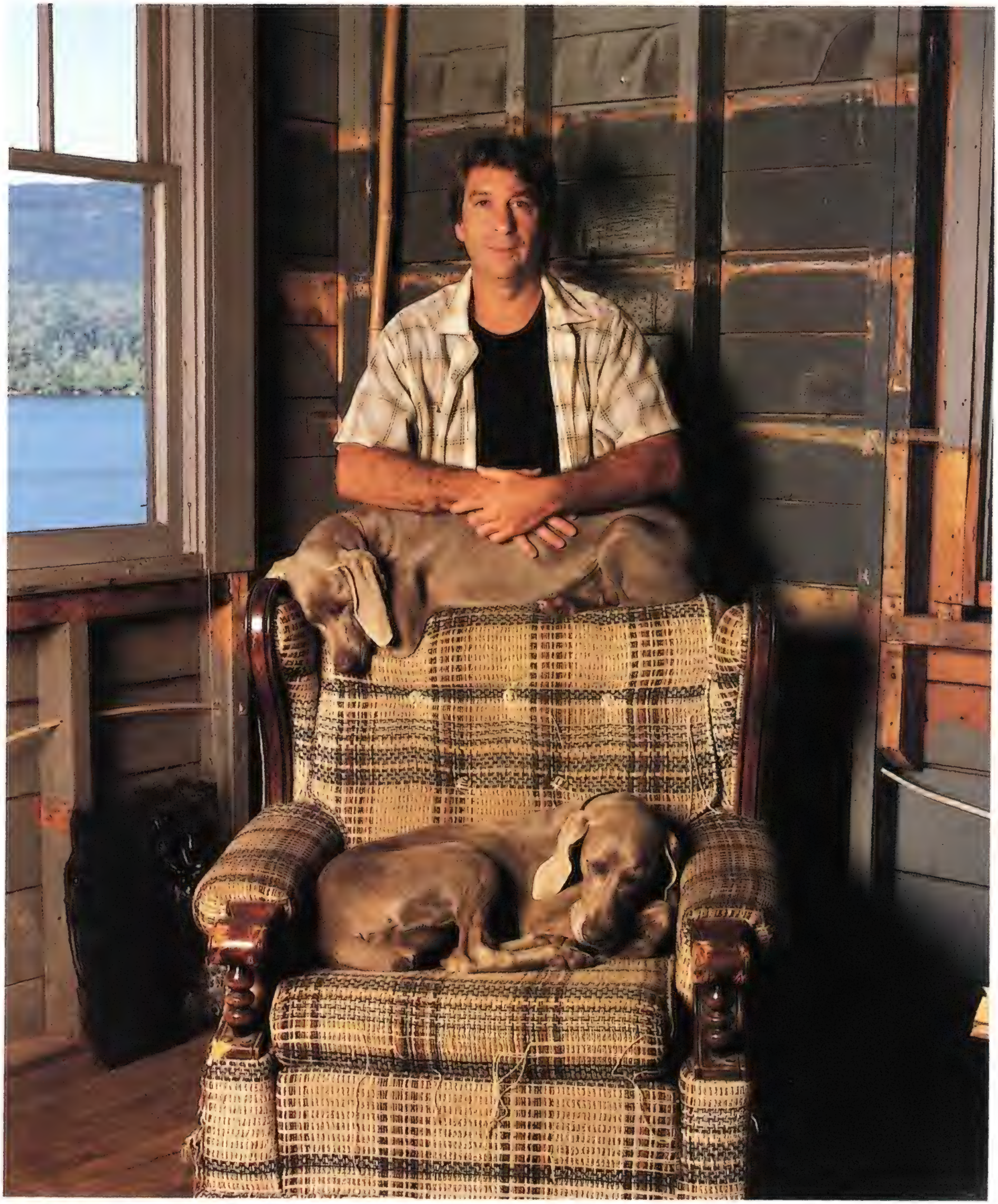
That's largely because all his paintings are new. After deciding in 1966 that painting was an obsolete form, Wegman abandoned it until 1985. Painting and drawing were the young Wegman's first response to the ambiguous narrative scrolled across the space of that boyhood wallpaper, and to the bright illustrations in his grade school geography books that inhabited his imagination just before sleep. It is to these images that Wegman has returned in his new paintings. Infused with the same gentle jokes, secret games and sly art-history references that characterize his videos and photographs, these paintings also suggest how thoroughly all his work is populated with the experiences and imagery of a small-town American youth: ships and airplanes, cartoons, television, and a boy and his dog.

Wegman splits his time between his loft in Manhattan's East Village, a former Orthodox synagogue where he shoots video footage and takes care of business, and his country house on 32 acres in upstate New York, where he does most of his painting. Summers find him in Maine at his lakeside lodge. Common to these venues are his dogs, who are companions as well as being his most famous models. The first to star in his videos and photographs in the 1970s was a weimaraner he named Man Ray, after the Dada artist and photographer (mostly, Wegman says, because "the sound of the name seemed kind of magical"). Today his chief canine models are Fay Ray (no blood relation to Man Ray) and Battina, one of eight of Fay's offspring, who is now nearly the size of her mother. At the entrance to Wegman's loft they play a good-dog, bad-dog game with visitors—Battina approaching, eager and friendly; Fay backing away, warily warning with sharp barks.

"Skewed five degrees from normal"

Although dogs are not the only subjects of his drawings, photographs and videos (and almost none appear in the paintings), they are a major source of Wegman's public identity. His accessible sense of humor and unique point of view (critic Kay Larson wrote that he is "skewed perhaps five degrees from normal") also contribute to his remarkable appeal.

For even in these days of celebrity artists, not many can duplicate Wegman's range. His work tours museums and is bought by serious collectors and major corporations, and also has been commissioned by NBC's *Saturday Night Live*. Wegman has appeared



At their lakeside lodge in Maine, the artist and his models (Fay Ray in the prime spot; her daughter Battina perched above) retreat from the rigors of Manhattan's East Village, where they live in a loft.

It's an artist, it's a comic . . . it's Wegman

Pace/MacGill Gallery, New York

Wegman's first weimaraner, who died in 1982, poses in *Man Ray Contemplating the Bust of Man Ray.*

on *The Tonight Show with Johnny Carson* and *Late Night with David Letterman,* as well as on the PBS series *Alive From Off-Center.* His summer home has been photographed for *Vanity Fair,* his Manhattan loft for *House & Garden,* and he has photographed the First Family's dog for the cover of *Life* magazine.

Wegman is no naïf, but he has protected the childhood qualities of innocent observation and the sense of serious play that children share with their animal friends. In person he keeps his insecurities under cover, but his lack of pretense seems congruent with the humorous and telling juxtapositions in his work. He can speed up to New York standards—on foot he'll suddenly dash across midtown avenues to avoid standing and waiting for long red lights—but in his loft, wearing black jeans and a green sweater with elbow patches, he seems comfortable in a slow, homey space.

Wegman sits down to talk at a carpentered table in the kitchen of his Manhattan loft, its glass surface covered with cascading piles of classical music compact disks. Behind the table are hundreds more, alphabetically arranged in a cabinet. He listens to them constantly now, an obsession that has grown since he was 16, when he heard Glenn Gould's recordings of Bach.

William Wegman was born in 1943 and spent his boyhood in Holyoke, a small town in the college country of western Massachusetts, where his father was a factory worker. (Wegman's own summer and college jobs included working as a night watchman and on an assembly line, screwing caps on bottles of Absorbine, Jr.) His childhood interest in drawing and watercolor painting was sidetracked by a teenage passion for hockey, but a high school teacher persuaded him that an art course was an easy "A," so he found an academic path that led him to a BFA in painting at the Massachusetts College of Art and then to the University of Illinois at Urbana-Champaign in 1965.

"The '60s were a great time for interdepartmental interaction," Wegman says. "Everybody from English and math, engineering and filmmaking, was getting together and doing things. Probably I was about the only one from art because they tended to sort of hang out and just isolate themselves."

That heady atmosphere of experimentation contributed to Wegman's disenchantment with painting. "Painting seemed like a kind of 19th-century activity. It seemed to have run its modernist course, but was stretched into the mid-20th century, and it turned into minimal sculpture. At the time, I was doing outdoor pieces, and working with sound and light. Painting was something you wouldn't be caught doing if you were an arrogant grad student, which I was. What's ironic is my paintings now have nothing to do with my last paintings in the mid-'60s, but more with what I did before I went to art school."

After Illinois, Wegman remained in the Midwest to teach art on a couple of small campuses in Wisconsin, where his heroic notions about art were purged by loneliness and isolation. His next job placed him in the opposite atmosphere, the large and (in the late

The author, a Pittsburgh-based freelance writer, has previously reported for SMITHSONIAN *on shopping malls (December 1986) and trolleys (February 1988).*

Pace/MacGill Gallery, New York

In *Guise,* Fay Ray freezes in place, peering out from under cover; shooting sessions are a real collaboration.

Arm Envy, like many Wegman photographs, a rich composition, can be seen as both funny and poignant.

Collection Gilles Fuchs, Paris

'60s) tumultuous University of Wisconsin at Madison. Wegman responded to the frenetic activity—and against the overstimulation. "I felt I was an isolated figure in an enormously uncontrollable but exciting environment. I never thought about this or said this before, but that's maybe why I turned to video, because it provided me with a sanctuary of being able to work inside a closed room without anyone else around. It was returning to a narrower little screen, but it also appealed to me because it was very big—you could broadcast it, it had the potential of reaching an enormous audience."

As the '60s ended, Wegman needed to move on. "I knew I had to go to New York or L.A., and I didn't have the nerve to go to New York." So he took off for Southern California, where he met artists like conceptualists John Baldessari and Allen Ruppersberg, and video artist Bruce Nauman. And at his former wife's behest he also made a fateful acquisition—the weimaraner he named Man Ray. He discovered that the dog stopped fussing when the camera was pointed at him, and that began Man Ray's career as Wegman's most famous model.

"California gave me confidence in what I was doing," Wegman says. "It was a wonderful period. But as much as I liked it there and as happy as I was about my work, I still couldn't sell anything or get a gallery. I was in countless group shows—like '24 Young L.A. Artists,' '11 L.A. Artists,' '17 Male L.A. Artists Plus Three Women.' But except for the photographs I sold to Ed Ruscha [a fellow artist whose purchase of 46 pictures for $4,400 supported Wegman for a year], I was living on food stamps." It was time for New York.

Still, instead of staying at his Manhattan sublet, Wegman spent most of his time in a studio in the woods in East Hampton, Long Island, a 10,000-square-foot abandoned factory owned by the father of painter David Deutsch, a California friend who had persuaded Wegman to make the move. "It was an easier transition," Wegman explains. It worked. He produced many of his best-known videos and black-and-white photographs there, and got a gallery and some shows.

Already in the early 1970s the qualities that were to characterize Wegman's work were apparent. To the experimental art of video, in particular, he brought two new aspects: narrative and humor. Until then, video artists differentiated their work from television by concentrating on the effects technically or culturally special to video and applying them principally to images without a story. Meanwhile, broadcast television worked in standard forms—the dramas, comedies or talk shows—to fill the commercial schedule. Wegman did something else: he created his own short narratives, which were refreshing and playful, but he also explored the medium and its place in art history.

Some of the videos from this period are just flat-out funny, like the one that begins with an angled shot of a hooded floor lamp. An offscreen voice says, "Oh Mom? Mom? I think Randy's going to be sick," and the lamp falls over. Others add poignancy, as when Wegman, onscreen, is going over a spelling test with Man Ray, the purported pupil, correcting mistakes while the dog looks on with his eager, puzzled eyes and cocked head. His ironies can be warning (Wegman urging an unwilling Man Ray to try his cigarette) or warm (Wegman wearing trick glasses with distorted eyes, making a mundane speech about horseshoes and baseball—but his sentiments about team sports are sincerely sweet).

The visual puns and pranks, the homespun satire and the disturbing turns, the honest role-playing or smooth-talking lies that expose the surrealism of real life, all recur in Wegman's videos and photography. So does the antic anthropomorphism. Especially when the subject is a dog named Man, this perspective on the human world links similar postcard humor (dressed-up cats around the dinner table) with a long and varied history of such imagery in art (in his new biography of Picasso, John Richardson asserts that virtually all the artist's work had anthropomorphic elements).

Wegman's work won immediate New York art-world acceptance. One of his first shows was reviewed by Laurie Anderson, now a famous performance artist but an editorial associate at *ARTnews* in 1972 when she wrote, "Wegman is a diabolically brilliant one-man situation comic." But both popular and art-world acclaim came mostly as a result of Wegman's trips to the Polaroid studios in Boston, beginning in 1979. The resulting color photographs, many of them featuring Man Ray, offer an astonishing array of approaches. Man Ray is depicted not only as a human but also as an elephant, a dinosaur and a frog. He is the subject for studies in texture, contrast, color and composition, and as a satire on the entire enterprise of turning a dog (or anything else) into an art object.

Wegman's method was to gather costumes and props and try things out. The results could be unexpected and change the nature of the picture. Working with dogs, Wegman says, "involves a lot of touching and handling, and honest enthusiasm. After 20 years of doing this, I know their limitations, what isn't good for them and what makes them unhappy, and I stay within those boundaries, or if I transgress them I don't pursue it."

Wegman's work with Man Ray was an odd but true collaboration. Witnesses to the later Polaroid sessions observed that even as an older dog, Man Ray was not just willing but eager to be dressed up and posed. "Dogs are bred to work with humans, and to not work with them is to neglect them," Wegman says. "I know from

Holly Solomon Gallery, New York

Holly Solomon Gallery, New York

In his paintings, Wegman explores themes from childhood, and from both high and low art. *Dock Scene* (1985) is a comment on a work by Jon Gnagy, guru of amateur artists. But in this version, disaster reigns.

experience they get very sad when they're not involved. Weimaraners in particular like games a lot, and they see it as an interactive game. The more serious the endeavor the more they thrive on it—and despite my silly photographs, it's serious work and the dogs take it seriously. A dog trainer told me that I made Man Ray very smart by asking him a lot of questions and by working with him."

These photographs of Man Ray (many collected in the book *Man's Best Friend*) and the resulting talk show appearances solidified Wegman's popular and art-world images. But that identification made everything more difficult when Man Ray died in 1982; Wegman's dogless photographs baffled some observers.

The transition was difficult for Wegman as well, who genuinely likes dogs. When they lived in the then undeveloped area near the World Trade Center in New York City, Wegman and Man Ray befriended the stray dogs that lived in the accidental caves formed by collapsed buildings. Even today, the "dog baseball" game of Wegman's most famous video is repeated during Maine summers, just for fun.

"I guess it was really a rough period," Wegman admits. "But it kind of liberated me from photographing a dog." He turned to drawings, which he'd done before as a complement to his other work and a relief from the complications of technology. "The drawings became more prominent and elaborate and turned into paintings by 1985." Wegman's drawings link all the aspects of his career, and he considers them "the core" of his work. "Drawing is more immediate—it requires the least apparatus, just pencil and paper. I can move very quickly into what I'm thinking about."

Wegman's return to painting was both a natural evolution and a difficult disjunction. "I'd been thinking about painting probably since about 1980, but it seemed like I'd made such a big deal out of giving it up in 1966 when I made my last shaped-canvas, hard-edge painting. It's kind of hard to say 'It's dead but so what?' and it took me five years to say it."

But after dreaming about what his paintings might look like, Wegman decided to start. "It was really scary to go out and buy a tube of paint and a brush and some canvas and gesso, and make the thing. It's a horrifying object, the canvas. In fact now when I go back to art schools and I see students scrubbing their canvases, there's something terrifying about that. The smell of turpentine . . ." Wegman's voice trails off, as if he's just been describing spilled blood. "A lot of the first paintings were about why I was painting. They were very varied in style—a real hodgepodge, as I marched through history in search of my own style. Then a few years later when I got more comfortable with technique, and it was no longer a special or scary event,

Neue Galerie, Aachen

Turner (center) recalls a painting by the English 19th-century landscape painter and is also literally a "turner," since it works as well upside down. *Landing* was inspired by a watercolor his grandmother owned.

Collection the artist

Perfect Hair, Perfect Teeth (1975), a pencil drawing with color washes, is a witty visual comment on that old truth, nobody's perfect. Wegman uses sketches to work out his ideas.

when I was just working as a painter, I painted without irony or tongue-in-cheek inflection."

After his first tentative forays Wegman found a way of working. "I start with the ground, painted with either acrylic or flashe [a vinyl acrylic paint that can be thinned with water]. I use it in a kind of stain way, to color the canvas, to provide a point of departure. Then the figurations are in oil. For the ground, I usually have a general landscape idea, or I may not at all, or I change it later. Sometimes the ground exists for a whole year or even longer before I paint on it, but usually it's within the same week. I stare at it for half a day, searching for a rightness in what's possible to paint. Because *anything* is possible—it's one of the frightening things. If you have an expressionist nature and you don't really have a tortured past, or something to play off of like a muse, then it becomes another problem what to paint."

In his paintings so far, Wegman has returned most often to the imagery of his boyhood. At first he used found materials and extended or rearranged them with the playfulness of his photographs. In *Landing*, he used as a point of departure an amateur watercolor owned by his grandmother, imagining what the rest of the landscape would be if the original painting were a detail of it. Other transformations had a certain vengeance. *Dock Scene* is from a painting by Jon Gnagy, the guru of amateur painters. "But in his, everything was serene," Wegman says. "The riverboat is chugging along nicely and so on. I made everything into a disaster."

Many paintings play with history, often juxtaposing elements of various periods along with different climates and geographies. *Past and Futurama, Migratory Architecture, Western Theater* and others embrace time and space with the abandon, if not the imagery, of frescoes and canvases of the Renaissance or of Depression-era murals.

In most paintings, Wegman also plays with historical styles of art. His painting *Turner* is an offhand homage to J.M.W. Turner, the English landscape painter, as well as a sight pun (the building is exactly reflected in the ambiguous ground that can be viewed as neither sky nor water, and so the picture is the same either way—literally a "turner"). Other canvases suggest, or even parody, the work of such artists as Matisse, Delacroix, Dufy and Watteau. The imagery of later paintings becomes simpler, using such figures as airplanes and ships with more delicacy against the painterly backgrounds. Wegman goes back to pictures of cowboys and Indians, to 1940s and '50s illustrations from such sources as old *World Book* encyclopedias and Cub Scout manuals, because they are the images that he first drew and painted. "It's a bypassing of my art education, to go back to those first impulses," he says. "I'm not saying I'm innocent anymore, but I use those boy-dream pictures because I find comfort and love in them that's both ironic and sweet at the same time."

Beyond the subject matter, Wegman's paintings reward persistent viewing with subtle layers and complex composition. These formal aspects, less apparent in the cleverness of his drawings and photographs, are presented more fully across the actual canvases. Through such qualities as texture and balance, traditional to the art of painting, there is both a maturity and a different order of mystery that suggest to some observers that Wegman's best work is yet to come.

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Today Wegman is back photographing dogs and other subjects, as well as painting. "I don't know what the paintings will be about in a couple of years," he says. "I don't have a plan for painting, as I do for photography, because the dogs get older. When Battina was small, I did some Madonna and Child poses with Fay. Now they're about the same size, so I'm working with mirror images."

According to his principal dealer, Holly Solomon, his canvases now sell at prices ranging from $12,000 (for the smallest) to $120,000 (for the oldest), and European response to the exhibited paintings was good, especially in Paris. Still, Wegman's initial anxiety hasn't entirely subsided. He attaches special importance to one of his earliest works since he resumed painting—*Hope*, from 1985 (below).

"The girl I painted is the Breck Girl, who you could see on the back of every *Look* magazine or *Saturday Evening Post* in the '50s," he explains. "In high school I thought the Breck Girl was beautiful—I was madly in love with her. I did a rendering of her then, which I still have. So I did a painting of her in a landscape, with a self-portrait of me in high school, and a manifesto of why I was making this painting and what I liked about it. It was a defense against criticism because it provided its own critical text, of why this painting was successful.

"In some ways there's something still truthful about the innocence that goes into this—it's not really innocent, but it pretends to be innocent because it gives you this stupid-looking painting, and it tells you the reasons behind it, which are just as dumb as they could possibly be. But it also protects itself by qualifying it, by saying it's a nice picture, and whatever you think, I'm happy with it.

"And that of course is a very loaded statement because I'm very worried about what people might think of my paintings. So I'm getting tough here, and I'm saying in a very dumb way I don't care, because in a way I don't, because I have . . ." And Wegman searches for the right summation. "Because I have enough stuff now," he concludes, and smiles, boyishly.

Hope (1985) depicts the Breck Girl—ubiquitous in magazines during his high school years, she was Wegman's love object—along with his self-portrait and manifesto explaining why the painting is successful.

I CHOSE RED FOR THE GIRLS' HAIR AND BACON RIND TO ACCENT THE PICTURE.
GREEN THEN BECAME A GOOD CHOICE FOR THE LAWN COLOR
I ADDED BROWN HIGHLIGHTS TO THE GIRL, CABIN ENTRANCE, WINDOW AND "CHIMENNY".
I THINK IT MAKES A NICE, SIMPLE PICTURE AND I AM MORE THAN
William Wegman

Holly Solomon Gallery, New York

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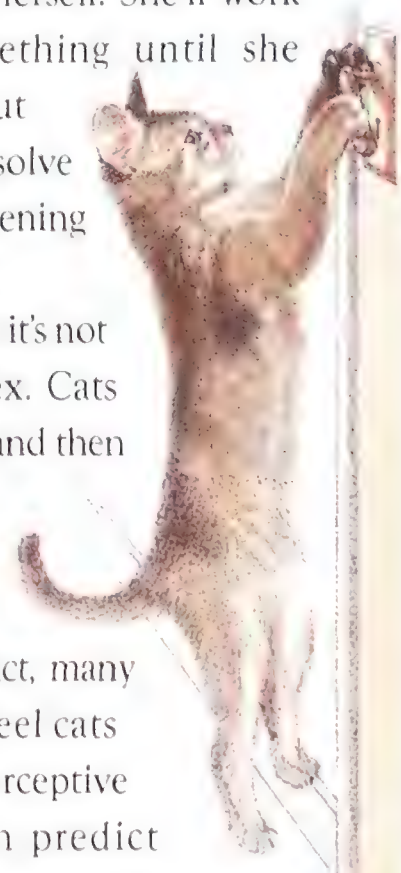

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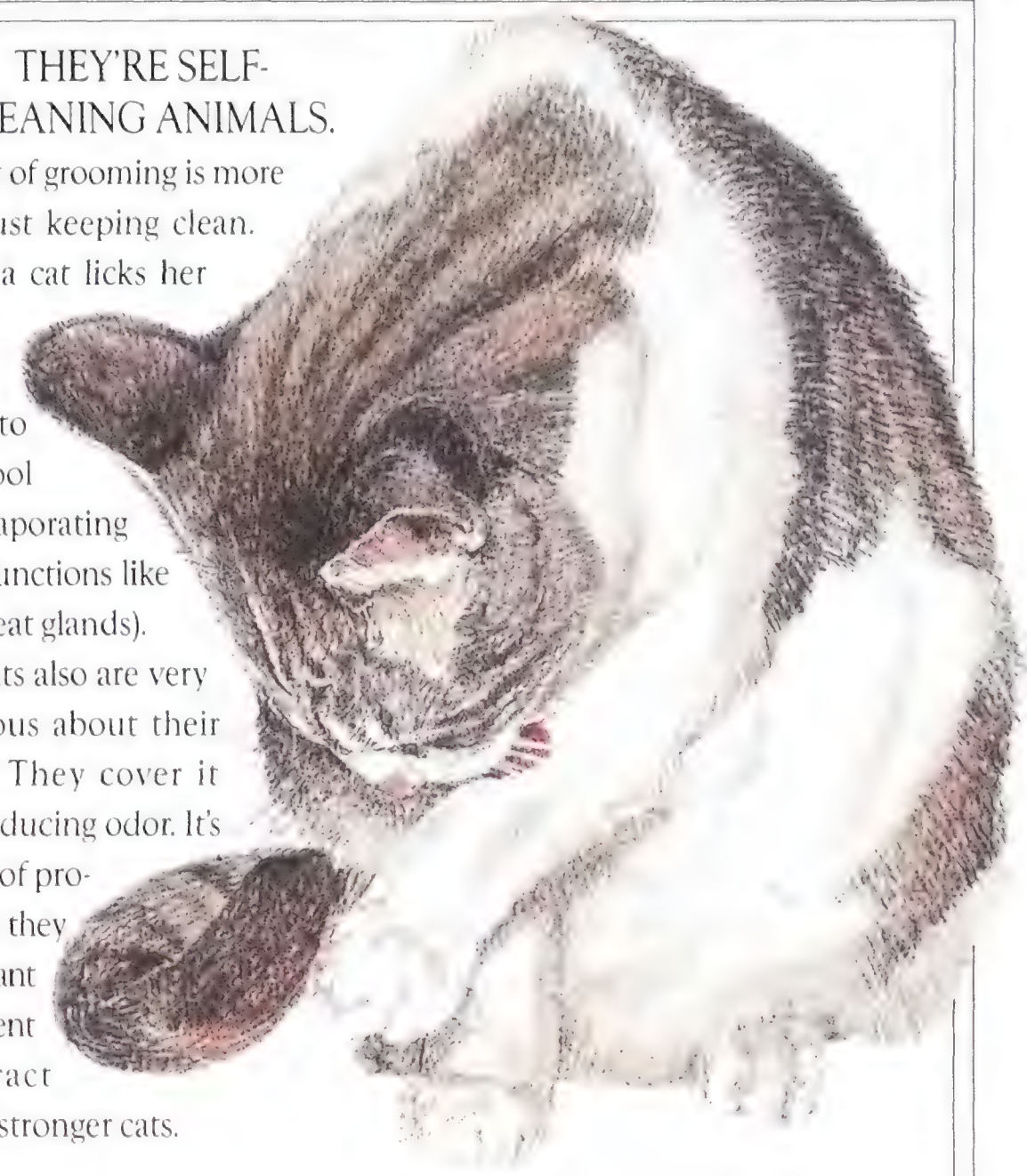

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Glorious reminders of a golden age of American gardening

Hand-colored glass lantern slides, presented to the Smithsonian by the Garden Club of America, reveal a horticultural extravaganza

On a warm mid-August evening in 1913, guests arrived at Beacon Hill House for the dedication of the latest addition to the villa's grand Italian gardens. Details had been kept secret, but no one expected that the party given at the Arthur Curtiss Jameses' stone mansion in Newport, Rhode Island, would be dull.

Arthur James, costumed as Cosimo de' Medici, escorted the guests to their seats. "Dimly outlined before them stretched the blue garden with a strip of lawn sloping towards a shallow lily pond, beyond which was a long lake reaching to a row of marble Grecian columns. When all was in readiness, Mrs. James, wearing a gown of dark blue brocade of 15th century Italy, was seen walking slowly through the shadowy garden . . . ," a society page reporter would note.

"There, in a dim blue light, she faced her guests and said, 'My dear friends, I am glad to have you with me tonight to witness the dedication of my blue garden."

Mrs. Harriet James (opposite) appeared as "Lady Sapphira" at her famous Blue Garden party; she wore a blue gown and a bejeweled headdress, and carried a flower-covered staff. In the Massachusetts resort Manchester-by-the-Sea, Katharine Lane and her King Charles spaniel (right) play next to lily ponds at Chimneys, the Gardiner Lanes' house.

The party was covered by the Newport *Daily News*, and Harriet James' friends knew she had outdone them again.

The only visual record of the evening is a glass lantern slide (opposite), one of 1,410 images that have been presented by the Garden Club of America to the Smithsonian's Horticultural Services Division. They are part of the Archives of American Gardens, a remarkable collection of photographs that will be available to the public within the next few years.

A preview of this horticultural treasure trove will appear in *The Golden Age of American Gardens* by Mac Griswold and Eleanor Weller, being published next month by Harry N. Abrams. The book, from which the pictures on these pages are taken, encompasses the years between 1890 and 1940, when grand estate building was at its peak, and the rich spent the year moving from the summer place to the country retreat to the city house.

There was no limit to their imagination—and extravagance—when it came to gardens. The garden of Mr. and Mrs. John D. Rockefeller jr. in Seal Harbor, Maine, is guarded by two lines of Choson Period Korean tomb figures and by walls topped with 10,000 yellow tiles from Peking's Imperial City. In Dublin, New Hampshire, the Frederick Brewsters started their garden at Morelands with a walled enclosure and terrace and added a formal garden that was in continuous bloom from spring to frost. Then came a rock garden, a sunken English garden ornamented with heliotrope and statues, a French garden with raised beds, a *jet d'eau*, a white garden with a waterfall, and for informal contrast, a sanctuary garden, where pine-needle paths wound among plantings of ferns, bleeding hearts and wild strawberries. At Castle Hill, in Ipswich, Massachusetts, Mrs. Richard Crane jr. employed a hundred gardeners and caretakers; her bills show that $13,000 worth of flowers were planted every year. In the 1920s, $13,000 bought a lot of flowers. Many of the estate owners imported their gardeners from Scotland and England; a real status symbol was a gardener who trained at the Royal Botanic Gardens at Kew.

But these efforts were not for social status alone, argue Griswold and Weller: "contact with nature was beneficial for everyone, and . . . making a garden, even a private garden to be enjoyed only by one's friends, was a socially valuable act if not actually a public duty."

During the last half of the 19th century, women who did not have to work found few acceptable outlets for their creativity and energy, and many of them turned to gardening. By 1900, horticulture was providing women with lives outside the home that were counterparts of their husbands' careers; women could even become landscape architects or writers of garden books without risking social censure. In 1915, writer Louise Shelton observed: "As a rule, there is but one recognized director of the garden's welfare—rarely are two members of a household equally interested. While *he* is by custom acknowledged master of the house, it is oftener *she* who rules supreme among the flowers."

Wherever there are gardens, there are clubs, and in 1913, twelve such groups met together in Germantown, Pennsylvania, to form the Garden Club of America. As the GCA expanded throughout the United States, among its principal activities were outings in which members visited other members' gardens.

Glorious hand-colored gardens

Because it was impossible to visit all the gardens, the clubs created a library of photographs that could be borrowed from GCA headquarters in New York City. Some of the era's best photographers were commissioned to make the black-and-white glass-plate positives, which in turn would be hand colored to create the lantern slides. Often the colorists had never seen the gardens or the flowers, which explains why the colors of many of the plant species appear somewhat unreal.

By World War II, the era of opulent gardens was coming to an end. There were a number of reasons: garden staffs found better-paying jobs or went into the military; income taxes imposed limits on extravagance; and, as the original estate owners died off, their property was divided among multiple heirs. Today a handful of the grand gardens are still much as they were; for example, Dumbarton Oaks, in Washington, D.C., and Longwood Gardens, in Pennsylvania. But all that remain of many of them are the glass slides.

The slides themselves were all but forgotten for many years, until 1964, when GCA member Harriet J. Phelps discovered them in the club's reference files. Many of the slides were unlabeled, but Phelps recognized their historical value, and efforts were begun to identify the 626 gardens. Correspondence and original garden plans were closely examined, and gradually the "imagination, power and resourcefulness" of a small group of GCA women pulled together the national collection that makes up the nucleus of the Archives of American Gardens at the Smithsonian. The slides, along with thousands of 35mm transparencies, will be entered on a laser disk so that the photographs can be easily viewed.

Harriet James would no doubt be pleased that so many people will now have the opportunity to see her magnificent Blue Garden.

Marlane A. Liddell

Writer Anna Gilman Hill built Grey Gardens, cradled in dunes, in East Hampton, Long Island.

Mrs. Alfred Thornton Baker's Princeton gardens bloom at Castle Howard Farm, built in 1863.

During the 1930s, Mrs. Cecil Baker's rooftop garden provided its owner both respite and a view of the Manhattan skyline on her visits to the city.

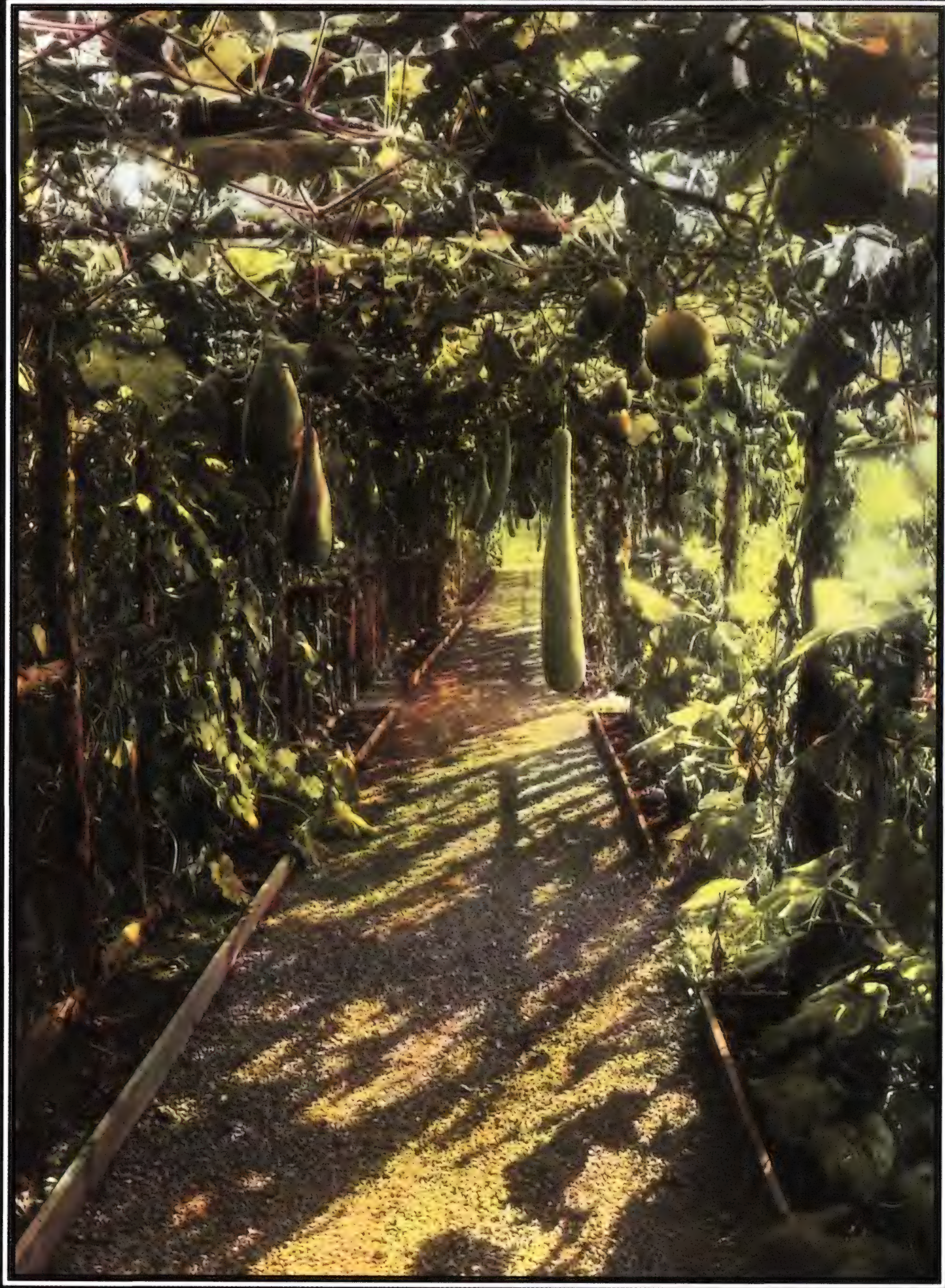
Hollyhocks, water lilies and vines soften brick and stone features of garden at Waveny, the Lewis Laphams' estate in New Canaan, Connecticut. Mrs. Lapham was known as "the grandest of garden grande dames."

View of the Santa Ynez Mountains is framed by pair of cherubs on the broad terrace at Arcady, the Santa Barbara, California, estate of George Owen Knapp, created in 1912.

Mrs. Lorne J. Knight built country retreat, Vikingsholme, on Lake Tahoe in Nevada. Eagle Falls (right) enhanced rustic, natural garden with the sound of falling water.

Mrs. Edward T. Stotesbury commissioned Addison Mizner to design her Palm Beach winter home; the patio became an outdoor living room, complete with Oriental rug.

Low-hanging gourds make obstacle course of rustic pergola, a Colonial revival feature of Miss Annie Burr Jennings' garden at Sunnie-Holme, in Fairfield, Connecticut.



Amethyst-lined geode from Brazil awaits pickup by its new owner at rock bazaar in a Tucson parking lot. Today, such pieces are bought not only by serious mineral collectors but also by interior decorators.

By Michael Kernan

Rock hounds never know what they are going to find

Rocks occur in all sizes, shapes and colors, and collecting them has become one of the most fascinating hobbies in the world

When you call them "rock hounds" . . . smile. Many are professional geologists, gemologists, paleontologists or industrial chemists. At the very least, you're apt to run into a serious mineral collector who owns a small fortune in exotic stones. Hobbyists, yes, enough of them all over the country—the world, in fact—to make rocks one of the most popular collectibles, ranking up there with stamps and coins. But even the most casual collector will tell you this is a business, too. The amazing thing is that every February thousands and thousands of them swarm, in vans, trucks, buses and private jets, to take over the eagerly waiting city of Tucson, Arizona. It is the World Series of rocks.

And believe me, it is a scene. Tents on lower Broadway are hawking rose-quartz obelisks, crystal balls, technical books, polishers, tumblers, emery wheels, saws, lights, sonic jewelry cleaners, goggles, hammers, blades, torches, brushes and picks. Tailgaters display their finds, fantastically colored rocks as big as your head, on the backs of their pickups. Tables set up along the sidewalks present gemstones, bolo ties, carved crystal, jewelry and belt buckles. Outside one large tent stand two amethyst-lined geodes, big as bathtubs, from the lava fields of Brazil. "Four thousand dollars each, 620 pounds," the man says. "They go as a pair. Yeah, well, it's an attention-getter."

At the Executive Inn, up the street, all but 5 of the 130 rooms are occupied by dealers for one of the dozen or so satellite shows that open here during the annual meeting of the Tucson Gem & Mineral Society. The

Buffs look over rainbow of synthetic gems displayed by dealers at the annual Tucson Gem & Mineral Show.

Photographs by David Hiser

People who love to look at rocks

Both: Ian Yeomans

Gold crystals were found and mounted in box by collector Herbert Corbett (opposite) and wife, Geneva.

Corbetts view specimens under microscopes in their living room. Preparing micromounts is their specialty.

show at the Executive Inn includes fossils, which means you can buy a mosasaur skull for $8,000, or a three-foot-long dinosaur foot, or mammoth bones, or a reassembled Ice Age bison, or an entire *Corythosaurus* skeleton. And, of course, the usual incredible jumble—stones in big boxes, in small boxes, on strings, in earrings, carved into shapes, polished or rough, framed, embedded in plaster, in glass, in wood, on stands, in elaborate lighted cases. The people come from six continents, and they sell things so small that they are mere dots, with an arrow drawn on the paper to locate them. And things so big, like the triceratops skull in the lobby ("We're asking $180,000," the owner says), that you would need a van to move them.

The main event here, the great Tucson Gem & Mineral Show, fills the football-field-size hall of the convention center, attracting upwards of 30,000 people. This year more than two dozen world-class museums sent exhibits, including the A. E. Fersman Mineralogical Museum in Moscow and the Smithsonian's National Museum of Natural History, which displayed the 75-carat Hooker emerald. An 8,000-pound boulder of pure copper known as the Manitou of Lake Superior was brought down from Michigan and set in the center of the hall (pp. 64-65). Still, the most striking aspect of the show was the sheer variety on display: rock bubbles, spikes, natural obelisks and threads; spectacular accretions splayed like emerald-green fans, stacked like a deck of stone cards, erupting in a series of perfect crystals, glittering in a profusion of facets.

But even at that, Tucson only scratches the surface, so to speak. People have been collecting rocks forever. How many of us, when we were kids, got a box of rocks for Christmas, all neatly labeled and nestled in compartments, to be rubbed and gloated over and traded? And how many were inspired to dig for our own rocks and eventually to build a private hoard to be kept under the bed in a carton or lined up on bookshelves?

No one is quite sure why, but over the past 20 years or so this unpretentious hobby has exploded. Collectors are as apt to *buy* rocks as they are to go out and look for them. Business is booming. Many of the customers—at the high end, at least—are Japanese and German. In this country, the greatest volume at stores like the Nature Company is in items under $10, and most of those buyers want something that looks or feels nice. Natural Wonders, another nationwide chain, displays rocks sliced as thin as pancakes and polished, others halved or quartered, and some whole. There are big chunks and little chunks, some under $16, some a lot more. There are crystal kits, books and assortments of polished stones gleaming in clear boxes. And on a typical weekend, a lot of the shoppers crowding into the place are *buying*.

Rock collecting isn't just commercialized; it has also become organized. In the Washington, D.C. area alone, there are nine rock-collecting clubs. Across the country there is one in nearly every good-sized town, and all of them hold weekly or monthly meetings, and most sponsor field trips. Here you find people young enough to be in school and others old enough to be their grandparents, brought together by their common passion. The collectors, in their thousands, often belong

The author, a sailor, knows a rock when he sees one, but he knows wind and waves better. He profiled painter Albert Bierstadt in February.

to more than one club and may attend several of the regional conventions held each year all over the continent. For many, it's a way of life.

Herbert V. Corbett and his wife, Geneva (above), have his-and-her stereo-microscopes set up permanently in the tiny living room of their Baltimore house. They specialize in micromounts, small-scale exhibits designed to be seen under the microscope, and the entire downstairs is more or less furnished with cabinets, cases, files, and stacks of egg crates, cigar boxes and cartons containing their 7,000 ("at least") specimens.

"We go on field trips all over the United States and Canada," says Herb Corbett, 82, a retired shipbuilding estimator. "We love Nova Scotia. Been going there every year for 30 years. Along the shores of the Bay of Fundy there, a volcanic area. Cliffs loaded with stuff." They belong to four micromounting groups. "A lot of the people have campers and trailers," Geneva Corbett tells me, "but I said no. When I vacation I want to vacation. No dishwashing in the trailer for me."

Today she is mounting bits of rock on tiny stands and setting them into plastic boxes less than an inch square. Around her on the card table are small pliers, pincers, bottles of glue, labels. She prides herself on her mouse-size handwriting; she can get the name, date and provenance of a sample into a half-inch square.

Once she found some triangular crystals in Nova Scotia, couldn't identify them, showed them to someone at the Smithsonian and was told they were nantokite—the first of the species ever found in North America. "Worth? Oh, I dunno," her husband says. "Fifty dollars if you can find someone who'll pay it." He shrugs. The money isn't the point.

Stories of rock finds sound rather alike after awhile. Once Geneva spotted a broken geode full of heulandite crystals in a Bay of Fundy cliff. On the off chance, she combed the nearby beach, and there was the other part, 40 yards away. It's a knack, the Corbetts say. You get so you can spot even the tiniest fleck of something rare on a bigger rock. In fact that was how micromounting began, with the Rev. George Rakestraw of Cornwall, Pennsylvania, after whom the tiny glass-and-cardboard boxes once used for micromounting were originally named.

"Micros are easier to collect," Herb explains, "and the quality is better because smaller crystals tend to be more perfect. And, of the 3,000-plus mineral species, more than half form micro-size crystals. Also, you can see a suite of rocks, a series of related forms of a species, on the same matrix."

Looking around the Corbetts' parlor I begin to get the sense that we are talking subculture here. A friend built their multidrawered cabinets; there are rock hounds who are interested mainly in presentation and exhibition. (Geneva has framed various oddly shaped curls of pure copper, titling them "Butterfly," "Mama Duck and Baby," and so on.) On the walls are photographs of the wonders you see in a microscope—cacoxenite blossoming yellow like a fantastic dandelion; there are even rock-hound photographers.

Arkansas dealer John Morton (left) and assistant hold a huge quartz crystal that was appraised at $22,000.

Collectors live in a world of their own. You know them by their cracked nails, dusty boots and keen, darting glances at the ground. "A rock hammer and a hand lens—that's all you need," said Anna M. Domitrovic, a young assistant curator of geology at the Arizona-Sonora Desert Museum outside Tucson. Anna has been hunting rock specimens for a long time, but these days she gets out only three or four times a year, and then she usually hands out what she finds as samples at show-and-tell sessions in the museum. I took a break from the gem show one afternoon to go out on a field trip with Anna and three of her friends. Jouncing along in a dusty pickup truck loaded with helmets, shovels, water cans and cookies, we headed into the Santa Rita Mountains an hour south of town. Garry Alexander, a lean, fortyish geologist for a copper-mining firm, fought with the steering wheel as the road turned into a path, then a trail, then a narrow gully-wash.

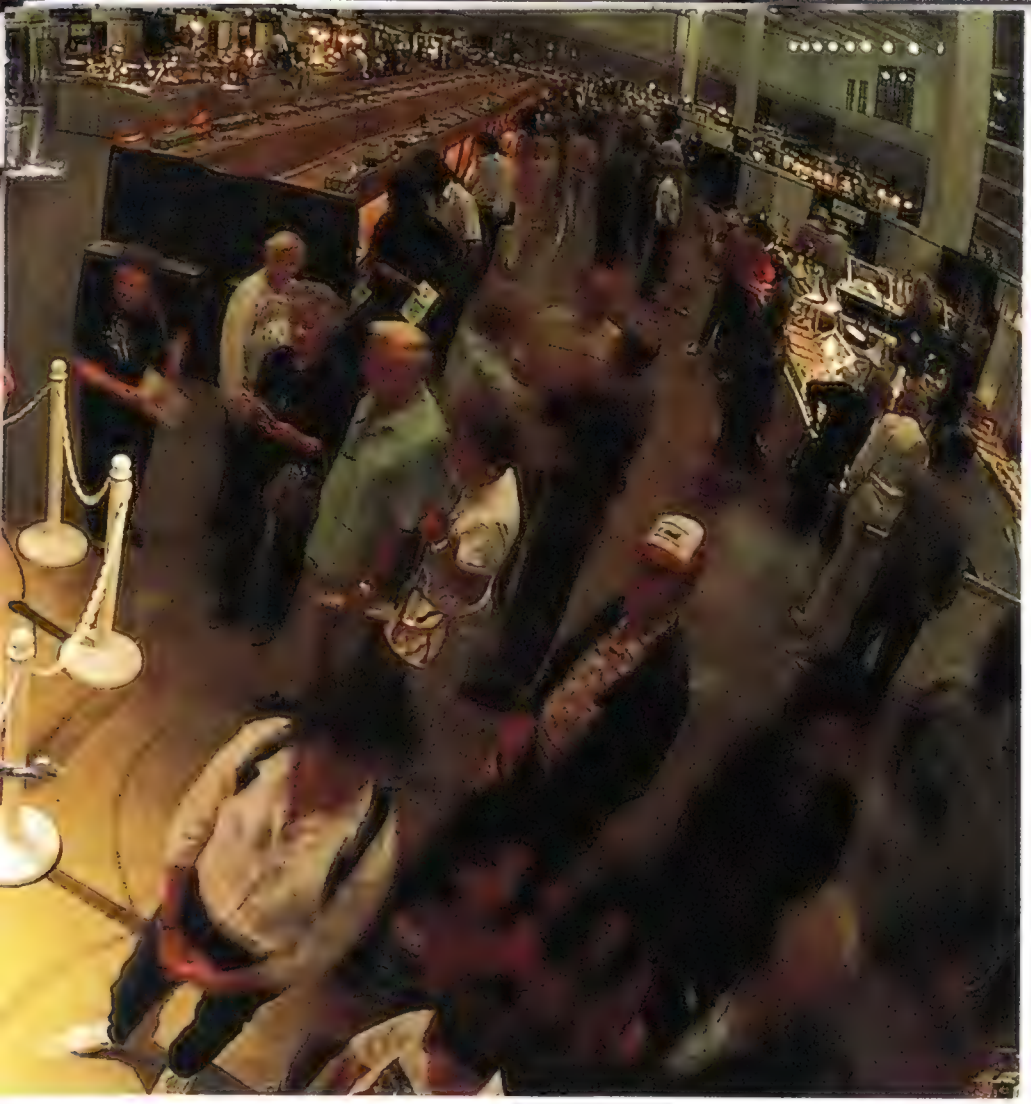
We got out at the abandoned Omega Mine, which looked like nothing more than a few little caves above a 100-foot beard of tailings. In a few minutes we were all over the hillside, each of us roaming in a different direction. All I could see was rubble, but Anna found me a piece of limonite, whose yellow dust came off like chalk, and a bit of malachite, a green copper carbonate. "There's lots of volcanic material here," she observed, "and because the area wasn't settled till recently, most of it is still in place. Also, the Ice Age didn't get this far, to mess things up with glaciers as it did in the Northeast."

Everyone brought flats, those ubiquitous corrugated-cardboard beverage cartons, for their rocks. We had flats on the tailgate, flats on the radiator, flats on the road. People went off, seemingly without purpose, clambering up the rubble and casually picking up bits of this and that. Then they brought their treasures back, and pretty soon little piles of rocks began to appear beside the truck: the ones they thought just might make it. Anna wasn't going to collect, but after a while even she had a child's handful bunched lovingly on top of an old fencepost.

We didn't talk much on the mountain, where the wind whistled constantly and we had to watch our footing. It was something of a relief to climb back into the truck. The others started telling stories about rock people they knew. "I had a friend," said Fred Sellers, a white-haired California collector in town for the show, "who had a rock from an old dead mine. Label on it said 1851. The label was worth more than the stone."

I asked Fred what got him into rocks. It happened during the battle of Pork Chop Hill, he said, in Korea, 1950. "We were under fire," he recalled, "and I dove down this old mine shaft. I was looking at the dirt walls, listening to the barrage. And there was this piece of rock embedded in the wall that looked kind of neat, so I dug it out."

Garry, on the other hand, has been a rock hound since catching the fever from his scoutmaster at age 11. Somewhere along the line, rocks became his career as well. "I don't buy a lot," he told me. "One or two pieces a year. I get depressed to see all the commercialism. Prices in the last few years have gone from $5 to $50, a hundred times that. What I like is to go down an old



California dealer Chris Raggon displays fossil shark's tooth and shows just how big the beast's mouth was.

The Manitou draws crowd at Tucson show. Four-ton hunk of native copper is from bottom of Lake Superior.

mine shaft, maybe 60 feet deep. So much down there. Our beauty is hidden in the earth. Sometimes you don't find any rocks at all. Just the silence and the wind and the solitude."

Patsy Schmidt, a young airline worker who was with us, talked about the thrill you get when you open a geode, or any rock for that matter, and see what no person has ever seen before. Geodes, which are globular rocks with crystal-lined cavities, can be extracted whole from the rock in which they formed. They differ from vugs—rock cavities, often lined with crystals—which usually do not have a hard shell, making them difficult to remove from the surrounding rock. There are also solid agate nodules, sometimes called thunder eggs, which are most often associated with volcanic rocks. Thunder eggs are the state rock of Oregon and occur all over the West.

A lot of rock hounds take to the field every weekend. Many are retired. But it is not a hobby for the sedentary. Unless you are the indoor type, a polisher of gemstones, you need a rugged vehicle as well as a penchant for adventure. It is surprising, my companions agreed, how quickly you graduate from shuffling along through mine tailings to climbing through a drift, or mine entrance, and then to crawling far back in the adit, or tunnel. And when you come to a dramatic drop in the tunnel, you start thinking about bringing a rope next time.

Bouncing back to the highway, while the rocks rattled in unison at each bump, my friends expressed scorn for "the guys who blast to get at the rocks." "You can see they've been there," said Anna. "There's a big hole and cigarette butts all around." As Garry put it: "They go right in without a lease or any sort of mining rights. They just bring their blasting equipment in and work until someone throws them out. It's a problem. In the last ten years, several places where we used to be able to go are closed because of these people. You can't get in there at all or the sheriff will arrest you."

In fact, many if not most collectors are often trespassing without permission when they explore private lands, but the conscientious among them are careful not to rip up or otherwise deface the landscape. Experts warn that places like gravel pits and abandoned mines are dangerous and are apt to be off-limits because of liability problems. Veteran hunters like Geneva Corbett mourn the "good old days before the quarries put padlocks on" and ruefully note that ever-increasing crowds of rock-seekers have caught the attention of federal authorities. There is talk nowadays of installing restrooms at some popular mine sites.

Rising anxiety about uncontrolled digging—for minerals and especially for fossils—has led some states to set up their own rules, in addition to the Environmental Protection Agency standards governing pollution and disruption of a site. "Some new federal legislation is being proposed to control random digging for fossils," according to David Thayer, curator of geology at the Desert Museum. The concern is that much of the scientific importance of a find depends on where it was dug up and what lay around or under or over it. By itself, a dinosaur's bones don't tell us much. Disruption of the context destroys any hope of learning more

about where the dinosaur lived and what has happened there since it died. A recent report of the Society of Vertebrate Paleontology comments: "Perhaps the strongest reservation about commercial collecting on public or private lands is that contextual information . . . is lost or poorly recorded. Additional frequently mentioned concerns are the documented cases of unethical practices by commercial collectors, commercial operations masquerading as legitimate academic institutes, the great increase in sales of scientifically important specimens to interior decorators and hobbyists, and the rapidly inflating prices that create profound security problems for institutional collections." A society committee, "deeply concerned that the BLM [U.S. Bureau of Land Management] and the Forest Service intend to permit collection of fossil vertebrates on federal lands under their administration without requiring permits for surface collection," would like a ban on all commercial collecting on federal lands.

Nowhere is the situation more dramatic than at the Petrified Forest National Park in the eastern part of Arizona. Photographs taken there a generation ago show the ground a few yards from a parking area covered with small bits of petrified wood. Today, that same area is bare. "We don't know how much we're losing," says ranger Terry Maze, "but we figure up to 12 tons a year. Hand-size and smaller pieces. Mostly they're just for souvenirs, not to sell. We ask if people are bringing any petrified wood into the park, and if so we mark it, and we ask again when they leave." The penalties are fines, set by weight, up to five pounds. Above that, it's a felony. There is an exhibit of conscience letters at park headquarters. People who lifted hunks of the ancient wood tell of the bad luck that ensued and send the pieces back.

Before the area became a national monument in 1906 (it didn't become a park until 1962), petrified wood was shipped East by the boxcar for tables and fireplaces. Logs were dynamited by people seeking amethysts. A grinding mill was built in the 1890s at nearby Adamana to produce abrasives for sandpaper, but it never actually went into operation. Outside the park, signs advertise "Free Petrified Wood." It can be mined, if you buy the mineral rights, and logs have been found buried as deep as 300 feet.

At an old mine, Tucson collector Carol Johnston uses her loupe to check out a piece of rock for garnets.

There are also other plant and animal fossils, including small freshwater sharks. In the Upper Triassic period, about 225 million years ago, continental shifting put Arizona close to the same latitude as Panama, where it was decidedly tropical. The region that is now famous for petrified wood and fossils was a plain then. It occupied a basin surrounded by a prehistoric sea to the west and by volcanoes and the emerging Rocky Mountains to the east. From the uplands flowed many streams that carried mainly volcanic sediments, depositing some of them in the swamps and marshes of the plain. Sometimes trees were swept down from the hills and collected there, too.

How the Painted Desert got that way

The accumulation of these large masses of detritus created what is now called the Chinle Formation, a colorful sequence of sedimentary rocks that includes the Painted Desert along with much of western New Mexico and other parts of the Southwest. The startling colors come from mixtures of minerals and organic materials: gypsum for the whites, iron oxides for the reds and, usually, decayed vegetable and animal matter for the various grays.

How does wood turn into stone? In one form of petrifaction, all or most of the buried organic material is gradually replaced by minerals. Because the surrounding sediments formed a mold around the wood, the external shape is left intact. Most Petrified Forest logs are mainly different types of quartz, con-

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Arizonan Janet Reue, wielding hammer and wearing geode earrings, searches for specimens in a mine shaft.

taining little wood. In permineralization, a second petrifaction process, the cells of the object are filled with minerals and most of the original cell structure is retained, so that it can be seen under a microscope. Fossilization depends partly on the nature of the minerals contained in the sediment. For example, the groundwater that flowed through the buried forest was rich in silica, which crystallizes into quartz. As that water soaked into the logs, and also bones, in the area, the silica formed the fine-grained quartz or agate that replaced the organic material.

When the logs happened to be hollow, the quartz crystals could grow unhindered, and this is why one finds pockets lined with big crystals of colorless quartz, known as rock crystal, and amethyst. These are exciting enough to tempt some people to blow up the logs with dynamite in order to get at them.

Collectors of minerals and fossils are intensely aware that these wonders of Earth's surface are irreplaceable, and as the number of collectors grows, so does the pressure for more control over their activities. There seem to be more collectors in the West, where many of the largest bones and most brilliant stones have been found. But the East, too, has its riches. Ninety percent of the world's industrial garnets are said to come from a single mine in New York State.

People, people. Some of them look at the wealth of ancient skeletons in the ground and see only dollar signs. Last year a Texas entrepreneur telephoned Ron Ratkevich, a geologist at the Desert Museum, and said, "I got a plesiosaur here, where can I sell it?" He wanted six figures. With the going rate for a triceratops skull now up from $100,000 to nearly twice that, there's reason to fear *Triceratops* may some day become endangered all over again.

On the other end of the scale you have amateurs like Helen Ross, a white-haired grandmother whose son Brad, the youngest of her eight children, got her interested when he took her rock hunting ten years ago in the Peerless Mine, 200 miles from her home in South Dakota. "We don't dig, we just look along riverbeds and in gravel pits," she says. Her best finds are fossils of ammonites, distant ancestors of the chambered nautilus. Helen found these near her home in Timber Lake. She showed them to Prof. Karl Waage of Yale, who used to come out to South Dakota with some of his paleontology students. "So we started a museum with these and other objects of local interest. Timber Lake only has 500-and-some people, but we have a museum, which I think is pretty amazing."

Dealer James Walker of Los Angeles has roomfuls of rocks in boxes, old dynamite plungers and mining gear. Although he deals in specimens fingernail-size and larger, he is familiar with the realm of micromounters: "We call them dust collectors," he laughs. "It's a rather academic world, not exactly driven by competition." For some, the excitement of peering through a lens and seeing a perfect little world, exploding in color, is irresistible, he says. For a geologist there is even more. One grain, for instance, can be a rare sight, worth thousands of dollars if it is, say, one of only a handful of extant pieces in a particular chemical series. "You have calcium silicate on one end of a suite and a magnesium substitute for it on the other end, and many grades in between."

Making an ugly rock appear beautiful

Jim is most interested in the conservation and preparation of specimens. The basic problem, familiar to restorers, is how much to clean up and beautify an ugly but interesting piece. "In this business, I'd say you tend to progress from pretty to interesting. Some of the most fascinating rocks, taken from mines centuries ago, aren't much to look at."

Jim has hired out to mining firms that want to know whether to reopen an old mine. He has hung on ropes 1,000 feet down and knows all about rotten shoring, bad air and loose rubble. And about the thrill of spotting some rare fleck of stone in a sweating dirt wall far underground. "It's a fraternity," he says. "It's not like your gemstone dealers."

But then, there are dealers and dealers. Some work big, selling crystals as long as your arm or fortune-teller's gazers as big as bowling balls. Compared with those dealers, Dave and Lyn Philips, of Frisco, Colorado, work small. Spread out under glass at their

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roadside tent in Tucson are aquamarines, tourmalines, sapphires, rubies, garnets, all the birthstones you could want, both loose and in necklaces and rings. Some are barely bigger than a pinhead. "They come from Thailand," Dave says, "or I buy from dealers and trade at shows. Some I cut myself. I go for variety. These opals are from Australia. I really know what a good deal is, or at least I think I do."

Values rise and fall like anything else, he notes. When tanzanite, a blue gemstone from Tanzania, was hot a few years ago, it cost a lot. More and more of it was mined until the value plummeted from $1,800 a carat to $400. Now its production is being limited, to control the price.

Dave and Lyn go to about four shows a year. "It's more a passion than a business," Dave says. "There's something about gems." Part of that "something" is suspense—the suspense of never knowing what you're going to find next. There's a familiar saying among mineral collectors. You hear it again and again, usually delivered with half a smile, and somehow it seems to sum up all of their frustrations and all of their hopes: "The best stuff lies in the mining company's crusher. Or it's still in the ground."

Visitors at Tucson's Arizona-Sonora Desert Museum marvel over a display of mineral gems from the region. In the foreground are, from left, crystallized copper, azurite on hematite crust, and botryoidal malachite.

BRITTANY HAIFA LAHAINA WATERFORD BALI NICE SYDNEY TANGIER JUNEAU LENINGRAD FORT-DE-FRANCE SANTAREM CAPRI

HONOLULU BERGEN VIGO GDANSK ST. CRUZ MOOREA PALMA DE MALLORCA PLAYA DEL CARMEN

LIVORNO PERTH MYKONOS KUALA LUMPUR NEW YORK OSLO PIRAEUS LONDON PAPEETE BORDEAUX BANGKOK QUEBEC BORA BORA BOMBAY SINGAPORE ROME SYRACUSE WHITTIER

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By Donald Dale Jackson

Who the heck *did* 'discover' the New World?

With Columbus' ships all but hull down on the horizon, it is time to round up the usual—and some unusual—suspects

First, a multiple-choice question. America was discovered by: 1) Japanese fishermen in about 3000 B.C.; 2) second-century Jews fleeing persecution by their Roman overlords; 3) Hui-Shen, a fifth-century Buddhist priest who set sail from China and spent 40 years in Mexico; 4) a seafaring sixth-century Irish monk named Brendan; 5) Leif Ericsson and his Norse comrades around the year 1000; 6) Prince Madoc of Wales in the 12th century; 7) British fishermen working off Newfoundland in the 1480s; 8) C. Columbus in 1492.

Answer: any of the above or maybe somebody else altogether.

Is this heresy? The quincentenary of the Columbus voyage, our nation's first-ever quincentenary of anything, is hard upon us. Marching units are already drilling, with fireworks and effigies of Columbus just offstage. Who but a churlish heretic would rain on his parade? The fact is that scholars and other infidels have been pinging away at old Chris for decades, not only blaming him for everything that's gone wrong in the New World, but also hatching alternate-discoverer theories with varying degrees of validity and charm, and hauling would-be Columbuses out of history's shadows. You can expect to hear more from them as 1992 nears.

Our Columbus-bashing impulse seems to run in cycles, says Dean Snow, an archaeologist in the anthropology department at the University at Albany, SUNY. "A bunch of books appear, they get debunked, there's a lot of frothing at the mouth, and then it dies down again. It used to be that every Columbus Day there was a newspaper story saying it wasn't Columbus, it was somebody else. You could count on it."

Some believe that the American fixation on our discovery derives from the country's relatively brief history, and the suspicion that we have thus been somehow shortchanged. To others, it's nothing more complicated than a Yankee lust for records. Unsurprisingly in this quilt of immigrants, nationalism threads through the debate—the Portuguese, Arabs, Africans, Scandinavians and a dozen others have their candidates. First-finder obsession may also stem from a taste for mystery, since there are just enough tantalizing clues of various kinds—in legends and archaeology, linguistics, art and even botany—to raise intriguing if often unanswerable questions.

Those who try to nudge Columbus from his pedestal operate in a twilight zone where certainty fades and scholarly respectability ebbs, where periodic disclosures are met by a deafening chorus of snorts. "You're challenging people with a lifelong investment in the accepted dogma," says Cyrus Gordon, a retired professor and prominent heretic. The consequences, he adds, can go beyond scorn—"job choices become limited."

In the academic orbit, the antiestablishment guerrillas are called diffusionists because they contend that the influence of the earliest cultures, such as Egyptian and Chinese, gradually diffused or spread around the globe in various ways, including pre-Columbian voyages to the New World. They are divided into partisans of the Pacific and of the Atlantic as the most likely pre-1492 travel routes, with the Pacific generally conceded to have the stronger case. Most scholars, however, stay on the sidelines of the argument. "It's an issue with no resolution," says Dean Snow. "Some things are unknowable, and I can live with that."

Those who can't live with it venture scenarios that vary from the reasonably convincing to the totally preposterous. Each discovery theory in the necessarily selective sampling presented here was chosen for one or more of the following reasons: the contender's persistence and durability (includes the usual suspects), its degree of acceptance among experts, and/or its inherent appeal—what might be called its enchantment quotient. The two generally acknowledged discoverers on this list, Columbus and the Norsemen, are here because intriguing mysteries persist about them. The clearly frivolous entries, like the contention of a French scholar that ancient Gauls discovered America and promptly abandoned it because of the great distances, uncultivated land and lack of towns (the wine

Entries in the Discover-the-Americas Cup Race include China, Japan, Spain, Ireland, Israel, Wales, Norway.

Illustrations by Michael Foreman

Candidate from Kyushu is said to have sailed 5,000 years ago, following the Japan Current to Ecuador.

was probably subpar too), are absent. Because little exists to prove it, so is the thesis that Egyptians discovered America on reed rafts, Thor Heyerdahl's *Ra* voyage notwithstanding.

A final caveat: I arbitrarily refer to the "discovery of America," knowing that Indians were already here—after crossing the Bering Strait—and thus were the real discoverers. The "encountering of America" is more to the point, and in this context "America" means the entire Western Hemisphere. Columbus didn't really discover America; he encountered the Bahamas.

Sayonara, Columbus. The case for a Japanese discoverer began with a find by an amateur archaeologist on the Pacific coast of Ecuador in 1956—pottery fragments dating back 5,000 years. The amateur thought the designs resembled those in descriptions he had read of Japanese pieces from about the same time. He wrote archaeologist Betty Meggers, at the Smithsonian's National Museum of Natural History, who was intrigued enough to travel to Japan to investigate. What she found convinced her that someone from Japan sailed to South America five millennia ago.

Meggers was astounded by the similarities between the Ecuador pieces and some pots made on the island of Kyushu in southern Japan at approximately the same period. Pottery from the two sites had not one, but more than 20 common design features: braidlike impressions, dog-bone and hourglass shapes, similar line patterns, and many more. "The designs," she remembers, "were so similar they looked like fragments of the same pot." Meggers found that there was no evidence of pottery in Ecuador before that time, suggesting that the visitors introduced it. "It was as if someone had waved a magic wand 5,000 years ago," she says.

How did these ancient mariners cross the Pacific? Meggers speculates that a boatload of deep-sea fishermen was caught in a storm and carried east by the Japan Current, which flows northeast along Asia's Pacific shoreline, off the Aleutian chain, and down the coast of North America to meet up with currents flowing along South America. Why Ecuador? "The coast bulges out there," she says, "but some things are unanswerable." A group of Japanese who tried recently to re-create the voyage in a catamaran drifted across the Pacific in 51 days, winding up in San Francisco.

The Japan-Ecuador connection that Meggers considers proved—"if the two finds had both been in the Americas, everyone would have accepted the connection," she says—is taken seriously, if not generally accepted by many scientists. Skeptics note the absence of other evidence pointing to a Japanese presence in prehistoric Ecuador; they cite recent finds suggesting that pottery in the New World may have preceded the presumed arrival of the Kyushu delegation.

Meggers, meanwhile, has found what may be another piece of the puzzle, evidence of a volcanic eruption on a small island off Kyushu in the same time period. "That eruption," she says, "spread ash all over eastern Kyushu. Perhaps this could explain why people had to evacuate." By boat. To Ecuador. Forty-five hundred years before Columbus.

The Tennessee Kibbutz. When they were first unearthed by a Smithsonian scientist in 1889, the nine skeletons found in a burial mound at Bat Creek in eastern Tennessee were thought to be Cherokee. The

Stalwart writer Donald Dale Jackson often appears in SMITHSONIAN. *In doing this article he resolutely refused to sail across either the Atlantic or the Pacific.*

candy-bar-size engraved stone found with other relics under one skull was believed to bear a Cherokee message. But in 1970, when Prof. Cyrus Gordon saw a photograph of the stone, he decided that researchers had been scrutinizing it upside down.

Gordon, an expert on early Mideastern languages who headed the Department of Mediterranean Studies at Brandeis University before his retirement, hypothesizes that the Tennessee Nine might have been the descendants of Jewish refugees who fled Rome between A.D. 132 and 135 to escape persecution.

A strong resemblance to Hebrew coins

In Gordon's rendition, the message on the stone reads either "for the Judeans" or "for Judea." The script, he says, bears a strong resemblance to that on Hebrew coins from around A.D. 100. A recent carbon-dating test on wood artifacts from the grave, he adds, shows that a mass burial took place between the years A.D. 32 and 769. He discounts the possibility of a hoax because field notes made by the original Smithsonian archaeologist indicate the soil had not been disturbed until the excavation in 1889.

Gordon is a respected scholar who happens to believe that a series of transatlantic contacts preceded Columbus' 1492 voyage. In the Bat Creek case, he says, "It's all there, we have corroboration and context." The bracelets found in the grave, he adds, were made of a kind of brass produced by the Romans between 40 B.C. and A.D. 200 but not afterward.

"Put yourself there," Gordon says. "You're a member of an oppressed minority. The Romans eliminated the Semitic commercial states—the Judeans, the Nabateans, et cetera—one by one. Your people are navigators and sailors. So what do you do? You get as far away as possible from the long arm of Rome, even across the Atlantic." Then maybe you sail into the Gulf of Mexico, you see open country and go on upriver. Bat Creek is in the Tennessee River valley . . .

China Beachhead. Generations of scholars have been piqued by the startling parallels in art, architecture and customs between ancient China and the advanced pre-Columbian civilizations of Mexico. Sky-dragon motifs, complex rainmaking ceremonies, tripod pottery, the use of jade as a grave ornament, papermaking techniques—in dozens of ways the two cultures separated by thousands of miles of ocean show striking similarities. Columbus-bashers, naturally, have trouble viewing all this as a chain of coincidences. They think somebody from one side of the Pacific paid a call on folks on the other side. Somebody like Hui-Shen, perhaps, a Buddhist monk who lived in fifth-century China.

Hui-Shen's story came to the attention of Western scholars in the 18th century. A French sinologist found Chinese documents that presented as historical fact a voyage by Hui-Shen and four other monks across the "Great Eastern Sea" to a land they called Fusang. The chronicle included descriptions of the people, animals and plants Hui-Shen observed during a stopover that lasted 40 years. Both the descriptions and his estimates of the distance support an argument that Hui-Shen's Fusang is Mexico.

The sailor-monks presumably caught the same east-flowing current that propelled their asserted predecessors from Kyushu. Some 2,500 miles beyond Japan, Hui-Shen encountered what he called "The Land of Marked Bodies," where the natives painted stripes on their foreheads. The distance and current direction would have put him near the Aleutian Islands at that point, where Captain James Cook and other explorers later remarked on the inhabitants' curious habit of painting stripes on their heads.

Fusang, Hui-Shen reported, was 20,000 *li*, or about 7,000 miles, from China; a voyage of that length via the Great Circle route would fetch up in the neighborhood of Acapulco. But historians are most intrigued by Hui-Shen's description of a wondrous tree he beheld in Fusang. It had sprouts that people ate, in addition to a reddish fruit, and bark that was used to make cloth and paper. The *maguey*, or century plant, common in Mexico, produces edible sprouts and bark used for

Hebrew entry putatively fled Palestine in A.D. 135 to avoid persecution. Evidence is in Bat Creek, Tennessee.

Chinese claimant is fifth-century monk Hui-Shen, who may have reached Mexico, staying there for 40 years.

both cloth and paper. When Hui-Shen at last returned to China he presented Emperor Wu Ti with a "semi-transparent" mirrorlike stone that sounds like the polished obsidian long used for mirrors in Mexico.

There are a few troubles with the Hui-Shen tale. For starters, the century plant lacks a reddish fruit. The voyager described cattle and wheeled carts that were not known in early Mexico, as well as a "kingdom of women" who were covered with hair and reached their full growth in three to four years (possibly a chauvinistic reference to female monkeys). Skeptics, some of whom nominate the Siberian island of Sakhalin as an alternate Fusang, steadily gained ascendancy in the debate after the initial revelations. They gracelessly point out that Fusang was known in Chinese tradition, even before Hui-Shen's time, as a kind of never-never land. The archaeological cupboard is bare of Hui-Shen artifacts, though no one disputes that he indeed existed. And there it rests.

The Gaelic Contender. Whatever he found or didn't find, Saint Brendan the Navigator made an impression. People named places after Brendan, an Irish monk from County Kerry who lived in the fifth and sixth centuries. They named an island for him that nobody would ever find, in fact, even though mapmakers stuck it out in the western Atlantic, and sailors hunted for it for centuries. Some came to suspect that it wasn't an island at all. They thought maybe it was Florida or the Atlantic coast of North America.

The Brendan tale is a hard kernel of fact wrapped in layers of fuzz, the latter spun from Celtic whimsy, religious imperatives and the fevered imagination of Brendan's biographers. All agree that he was a real person and an accomplished seafarer. All agree that there was in his time a tradition of sea pilgrimages by Irish monks. Beyond this skimpy file of accepted fact, the mist gathers and Brendan tacks out of sight.

His adventures, recounted in a medieval best-seller called *The Voyage of Saint Brendan the Abbot,* begin with Brendan and his companions setting off in a curragh, a skin boat like a type still used in Ireland, headed for "the land promised to the saints." His travels are enlivened by the appearance of demons and miracles, but also by vexingly vivid descriptions of recognizable places—Iceland; the Faeroe Islands, north of Scotland; the Sargasso Sea. Thus, when the pilgrims arrive at a flat, flowery land surrounded by translucent water, it's tempting to imagine them in the Caribbean or Florida. And when they finally come to the promised land and hike 40 days to a broad river, the suspicion that they had reached the American mainland rises, despite all the warning signals, only to subside again when another implausible anecdote unreels.

The eminent historian and Columbus biographer Samuel Eliot Morison dismissed the Brendan story as "good copy" based on a real voyage or voyages "enhanced by Celtic imagination." Geoffrey Ashe, on the other hand, a researcher not given to giddiness, pronounced the Gaelic entry "the only pre-Norse 'discovery' by Europeans to achieve the status of a recognized theory," which sounds almost presentable. When a modern-day crew sailed a curragh from Ireland to Newfoundland to show it could be done,

All Irishmen know how Abbot Brendan headed west in a skin curragh, to "the land promised by the saints."

Dean Snow scoffed that this proved only that "five 20th-century men who knew exactly where they were going, given enough time," could get across the Atlantic in a leather boat. But don't bad-mouth Brendan in Eire: the Irish believe Columbus researched the saint's voyage in Galway before heading west.

The Welsh Indians. The tale of Prince Madoc, fearless New World explorer, surfaced first in a book published in England in 1583. Madoc was described as a peaceable sort who chose to sail away from Wales when his brothers fell to squabbling after the death of their father, the king of North Wales. The prince voyaged to "some part of Nova Hispania or Florida," returned to Wales to gather up ten shiploads of settlers, then disappeared again into the western sea. Cynics suspected that the timing of the Madoc revelation was related to Britain's need in those years to make a case for its claim to North America.

A marriage of Madoc and Mandan?

The story persisted into the 19th century in the form of recurrent reports of blue-eyed, Welsh-speaking Indians in America. The most popular theory was that Madoc's colonists intermarried with Indians and eventually migrated to the Dakotas, where they were known as Mandan Indians, "Mandan" being a corruption of "Madagwys," as Madoc's followers were called.

George Catlin, the American artist who lived with the Mandans for part of 1832, was persuaded that they were Madoc's people by their fair complexion, blue and gray eyes, language parallels, and similarities in the round wicker boats favored by both the Mandan and Welsh tribes. The Welsh Indians even turned up in American schoolbooks. But, as Geoffrey Ashe observes, the Welsh Indians in travel yarns were often "a little farther up-country than the traveller himself had gone." Too bad.

Welsh-speaking Indians? Certainly, if Prince Madoc of Wales actually made it to Mobile Bay in 1170.

Covert Operations. British playwright Oscar Wilde once remarked that America was discovered by a dozen people before Columbus, "but it had always been hushed up." A letter that turned up in a Spanish archive 34 years ago suggests that he might have been right. The letter, written by a Briton in 1497 or 1498, alludes to an earlier discovery of the land that British explorer John Cabot found in 1497. The land was Newfoundland, the discoverers, fishermen. The date, carefully worked out by an eminent British historian, was most likely between 1481 and 1491, which means pre-Columbus, though just barely. Even more tantalizing, the letter raises the possibility that Chris himself knew of the earlier discovery.

This intriguing scenario was published in an obscure scholarly journal by historian David Quinn in 1961. Quinn stitched it together from the letter and his own research on vessels sailing out of Bristol, England, in the 1480s. The letter was addressed to a Spanish official identified as "Almirante Mayor." Since this was a title often applied to Columbus, Quinn believes the letter was sent to him. It mentions the writer's certainty that the land discovered by Cabot "was found and discovered in other times by the men of Bristol . . . *as your lordship knows.*" There is no clue as to exactly when his lordship came into this information.

Since the Bristol men were fishermen, they probably saw the mainland but didn't go ashore. And they kept their find secret, Quinn speculates, for the reason fishermen always do—the news, probably of the Grand Banks fishing grounds, was too good to share.

Another "secret discovery" claim features the Portuguese, who, as the leading navigators of the 15th century, clearly *should* have discovered the New World even if they didn't. One Portuguese candidate is Joao Vaz Corte-Real, who happened upon something—North America, South America, or a West Indies island—in 1474.

Leif in the Wind. Dramatic archaeological finds in Newfoundland in the early 1960s made it clear to everyone save hard-core Columbophiles that Norsemen beat their man to the Western Hemisphere by some

500 years. Norwegian archaeologist Helge Ingstad discovered the remains of a large hall and other artifacts that confirmed Icelandic-saga accounts of a settlement dating from about the year 1000. The Norse debate then turned to questions of how long the Vikings lingered and where else they might have rambled.

Leif Ericsson, described in the sagas as a large man "of handsome appearance," is traditionally credited with the Norse discovery, but the sagas actually identify the first Norseman to espy America as one Bjarni Herjolfsson, in 986. History would have made more of a fuss about Bjarni if he'd gone ashore; he apparently cruised off Canada and then scurried back to the Norse colony in Greenland. The intrepid Leif followed by sailing the Greenland-to-Canada route about 14 years later, landing at a place the sagas call "Vinland the Good." The not-always-reliable sagas ("They're a mix of fact and fiction, but on the whole authentic," says Einar Haugen, a retired Scandinavian scholar from Harvard) sketch a series of adventures over the next 10 to 20 years, including an attempt to establish a permanent colony, several bloody run-ins with the local inhabitants, and an intramural quarrel that ended in violence and abandonment of the settlement.

Of course Leif Ericsson did make it circa A.D. 1000, but just where, and how often, is still under study.

Was Vinland in Newfoundland? Maybe, maybe not. Prior to Ingstad's dig, the leading candidates were Rhode Island, Cape Cod, the Boston area and Nova Scotia. One problem is that the name "Vinland" was supposed to derive from grapes found there, and Newfoundland is too far north for grapes. Ingstad proposed that Vinland could also mean "meadow" or "grassland." But the sagas also have Leif sailing upriver at the site, and there's no navigable river there. Haugen, an expert on early Scandinavian writing, nominates the Charles River and Boston as more likely.

Norse waters were further muddied when a map, allegedly showing the North American mainland as described by Norsemen and drawn some 50 years before Columbus, was acquired by Yale in 1965 (the announcement came on Columbus Day). Believers, nonbelievers and innocent bystanders have been debating its authenticity ever since. The map has a suspiciously accurate rendition of Greenland, among other puzzlements; this presumes a circumnavigation of the island, a character-building trip at any time.

Wandering Norsemen in Oklahoma?

A brisk cottage industry has meanwhile thrived in the discovery and translation of the "rune" inscriptions purportedly left behind by Viking rovers in places as far from the sea lanes as Minnesota and Oklahoma. Rune fanciers, who work the misty fringes of the discovery debate, find enough ambiguous references in the Icelandic sagas to support their contention that wandering Norsemen carved Kilroy messages in stone before they expired. Most scholars huffily dismiss the rune claims as either overimaginative transcriptions or outright hoaxes.

Myths after Christopher. He stands alone at the end of the long line of pretenders, taller than the rest, his hat and dignity slightly askew but intact, the once and future icon, secure and unbudgeable on his pedestal. Even Columbus-bashers offer him their grudging respect: "Columbus was unique," Cyrus Gordon says. "He alone united the Eastern and Western Hemispheres. 'Discover' is a misleading word for what he did. He did not keep his voyages secret but let the whole world know. He was, so to speak, the first discoverer to hold a press conference." Indeed, even if others preceded him to the New World, as the Norsemen clearly did, it was Columbus' well-publicized voyages that led directly to its settlement—regrettably for the Indians—by Europeans.

Columbus has taken the pummeling front-runners

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always get, not only in the form of alternate-discoverer theories, but also in hazy charges about his own exploits. If the Admiral of the Ocean Sea could hear all the accusations leveled against him, he would no doubt spin in his grave, if indeed we were sure of exactly where he rests (SMITHSONIAN, October 1974). Aside from the "Newfoundland" letter, suggesting he knew of the Bristol fishermen's discovery in the 1480s, there are three principal allegations about Columbus: the Unknown Pilot mystery, the Northwest Passage caper, and the Women-and-Children's Boat thesis.

The Unknown Pilot story has a Portuguese or Spanish navigator accidentally discovering America in 1478 or 1481 or 1484 and returning half-dead to the island of Madeira, where Columbus lived at one time. Columbus takes the ailing pilot into his home and ministers unto him; just before the man dies, he confides his astonishing find to his benefactor, who of course appropriates it as his own. In the Northwest Passage tale, a fragment from a Columbus letter is read to mean that he sailed on a secret expedition, led by a captain who was Danish or maybe Polish, and that they unsuccessfully searched the Canadian mainland in 1477 for the Northwest Passage. What they found

If the champions of the other explorers are to be believed, when Columbus finally did manage to reach

would thus be a pre-Columbian Columbian discovery.

In the Women-and-Children's Boat scenario, Columbus is aboard a Portuguese ship in the South Atlantic in 1482 or 1483, when one or more boatloads of Carib Indian women and children heave into view. The women may be escaping a Caribbean volcano (Mont Pelée on Martinique?) or simply out for a row, but Columbus learns to communicate with them (before they're sold into slavery) and in this way hears about the Indies.

A carefully worded conclusion would normally be in order at this point, something like "The evidence seen thus far suggests that with the exception of the Norsemen, none of the alternate-discoverer theories has yet gained general acceptance . . ."

A quote from Mark Twain, in a slightly different connection, might also be appropriate: "The researches of many commentators have already thrown much darkness on this subject, and it is probable that, if they continue, we shall soon know nothing at all about it."

But I'm going to give myself the last word. Columbus may have encountered the Bahamas, the Norsemen may have beheld Canada, but I feel pretty certain that Madoc the Mandan discovered America.

the New World he was a latecomer to the party; for natives of the Americas, they were all latecomers.

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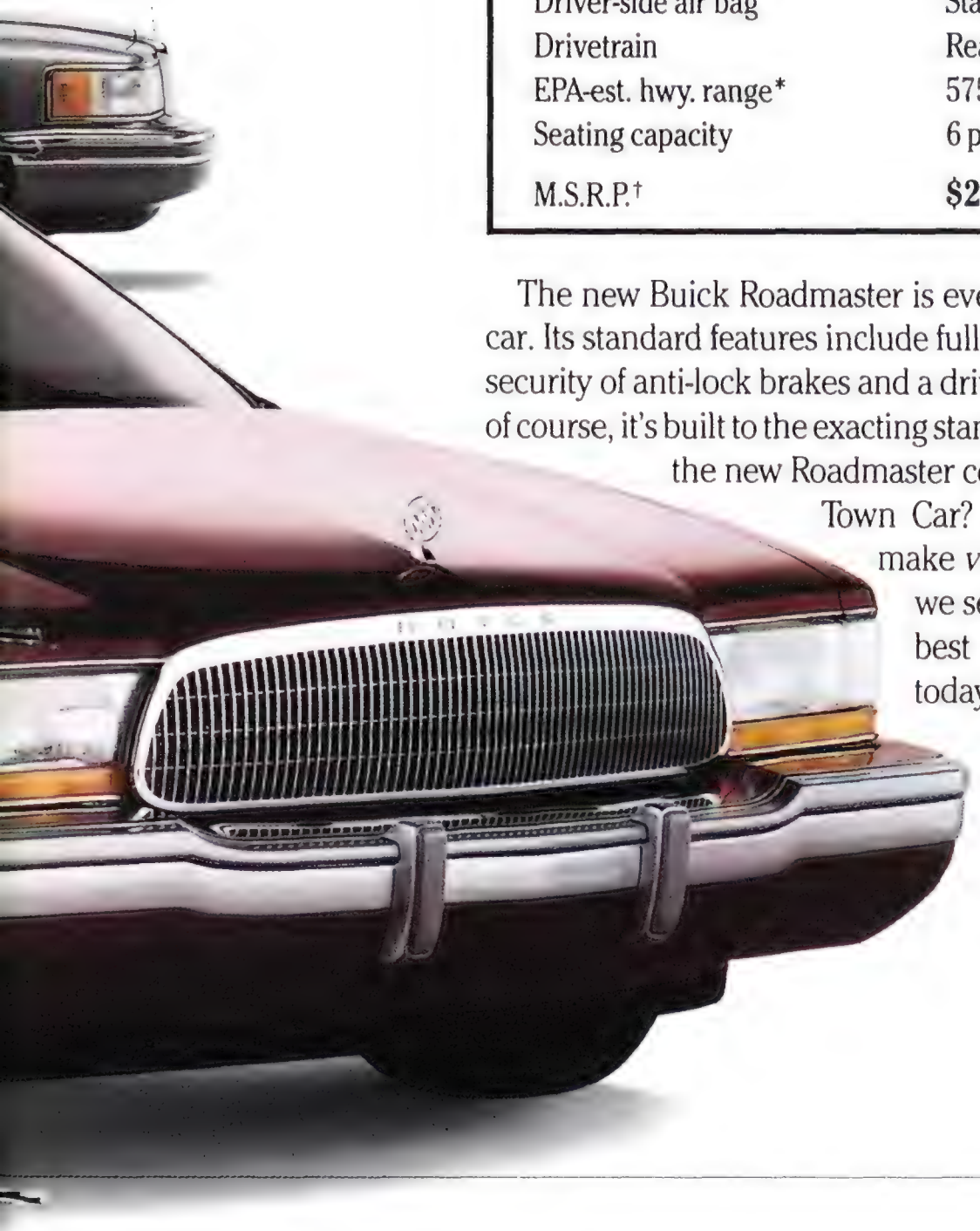

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Preparing for war, a machine-gun crew in World War I helmets fires off a stream of .30-caliber blanks at a pair of low-flying Douglas A-20 attack bombers threatening the environs of Lake Charles, Louisiana.

During the first day's action infantrymen clump through rain and mud outside Alexandria. Weather, as well as poisonous snakes, ticks and chiggers, helped make the war games dangerous and painful.

By Richard M. Ketchum

Warming up on the sidelines for World War II

Plunging into maneuvers in Louisiana in the fall of 1941, draftees and regulars got in shape for a war with real bullets

Zero hour was dawn on September 15, 1941, and the troops moved out of their bivouacs toward the river crossings under cover of low, darkening clouds and a torrential downpour. Vehicles of the 1st Armored Division rolled across the Red River bridge at Shreveport and turned south. Reconnaissance, artillery and infantry units of the 2d Armored Division crossed the river north of Natchitoches, and the division's tanks lumbered over the swollen stream halfway between Shreveport and Natchitoches. War had come to Louisiana.

These outfits belonged to the 130,000-man Red Army commanded by Lt. Gen. Ben Lear. They had orders to attack and destroy a numerically superior Blue Army—some 270,000 strong—under Lt. Gen. Walter Krueger, which was 50 miles to the south, invading the United States from the Gulf Coast.

What was taking place was the penultimate phase of the most ambitious war games ever held in the United States, which had begun with corps exercises in May on the West Coast, followed by "warm-up" maneuvers in June and August in Tennessee and Arkansas. Two whole armies were now engaged in Louisiana; a month

Men of 37th Division cross flooded Red River in new assault boats. Some 1,200 made it, then were captured.

and a half later, army-versus-corps exercises would be held in the Carolinas.

Combative Ben Lear headed south as soon as his troops bridged the river, sending his armor plunging through the rain to strike deep into enemy territory. For two days his Red tanks were lost from view; then they suddenly reappeared where they had last been seen. Pausing for infantry to move up from the rear so they could hit the Blue forces marching to meet the attack, they had waited in a skillfully concealed position—but the delay proved fatal.

Krueger was resourceful, an adroit tactician. Commanding a force vastly superior in infantry, artillery and antitank battalions, he was quick to capitalize on the Red armor's failure to keep moving. He massed his troops directly in front of Lear's tanks and called on Maj. Gen. Herbert Dargue's air force, which had won control of the skies, for support. Hammered from the air, hampered by weather and a waterlogged terrain that made maneuver all but impossible, the Red armor broke out of its position and made a frontal attack straight down U.S. Highway 171, where it ran headlong into what a *Life* reporter called "the greatest concentration of anti-tank fire ever gathered in the U.S. in one place." Within 24 hours, Lear's 2d Armored Division had lost more than a fifth of its tanks.

"Nuts to you, General, this is war"

Meanwhile, Dargue was pasting Lear's rear-area supply dumps as far back as Shreveport. Navy planes operating under Army command blasted tanks and blew up bridges across the Red River. A company of paratroopers, the first to be dropped in U.S. maneuvers, landed behind Lear's lines, cutting off traffic and communications, and rolled smoke pots (representing explosives) into the general's headquarters. (To the disgust of the raiders, war game umpires ruled the feat invalid because the soldiers had inadequate markings on their uniforms and their vehicle.) Striding into a Red headquarters office, one Blue private ordered everybody to surrender. When a high-ranking officer ordered him to cut the theatrics, he answered, "Nuts to you, General, this is war."

Then Krueger threw in Maj. Gen. Innis Swift's 1st Cavalry Division—17,500 men on horses, motorcycles and scout cars who swept in from East Texas on a night attack, slanting east and north around the Red Army's right flank. Ignominy for Lear's men arrived in the form of leaflets dropped from Blue planes: "Your commanders are withholding from you the terrible fact of your impending defeat. . . . Your food stores have been captured. . . . No one is going to bring up any of the steaks that [Krueger's Blue] Army will have tonight. Rout, disaster, hunger, sleepless nights in the forest

In Phase 1 of the games, a Coast Artillery battery in Alexandria used .30-caliber machine gun on a tripod.

Competing Red and Blue Army generals Ben Lear (left) and Walter Kreuger face off at a postgame critique.

and swamps are ahead of you—unless you surrender, surrender while there is yet time."

At the end of five days' fighting, General Lear's Red Army was backed up to the Red River, its flanks turned, its gasoline supplies captured by Blue cavalry, its morale dampened by the beating it had taken. *Life*'s reporter Edward K. Thompson encountered the captured crews of 18 Red tanks sitting glumly on top of their vehicles. One officer, he wrote, "had a lump on his head from a stone thrown by a Blue." "I'll run over them next time I get into a tank," the officer told Thompson. Five days later he would have his chance. On September 24 the second phase of the Louisiana maneuvers was scheduled to begin.

While the United States played at war, most of the world's great nations *were* at war. On the same day that Lear's Red Army attacked Krueger's force, German troops were entering the suburbs of Leningrad after cutting off another Red Army, and a siege began that would last for 900 days and cost an estimated million Russian lives. Most of Europe had been overrun by the Nazis; heavy fighting was reported in the Ukraine; German armies were within 200 miles of Moscow. Of the Allies, only Great Britain held out, but its capital city was under incessant air bombardment, its Atlantic lifeline imperiled by German U-boats.

Historian-editor Richard M. Ketchum is author of 12 books. The most recent, The Borrowed Years, 1938-1941, *was published by Random House in 1989.*

In North Africa, Gen. Erwin Rommel had pushed the British back to the Egyptian border. The Japanese had occupied French Indo-China and had been warned by President Franklin Roosevelt against further aggression.

On September 1, 1939, the day Germany invaded Poland to start World War II, Gen. George C. Marshall had been sworn in as Chief of Staff of the U.S. Army. A quiet, intense man whose very presence inspired respect, he tolerated neither fools nor the blunders of those who should know better, and as the nation's top soldier he had plenty of both to reckon with. His command was the smallest, worst-equipped army of any major power. With 188,000 men under arms—all volunteers—it ranked 19th in the world, between Portugal's and Bulgaria's. Some 8,000 soldiers carried the new Garand rifles; the others made do with worn, World War I Springfields. The Army had only 20 medium tanks. The air force's most potent weapon was the new B-17 bomber, of which there were just 19. To replace its .50-caliber machine guns, the United States was relying on a new 37-millimeter weapon. In 1939 the Army had only one available, and the weapon was already obsolete.

Even with a world war raging, Americans were obsessively antimilitary, hostile to the Army and to the very principle of rearming. Still angry over the 1914-18 conflict that had been fought to end all wars, resentful because European nations had defaulted on their debts, and certain that munitions makers—the "Merchants of

After landing in cottonfield in a surprise attack on the Red Army, men of the 502d Parachute Battalion get instructions on exactly how to lay mock charges that will blow up a bridge near the small town of Clarence.

Death"—were behind World War I, the United States had turned down membership in the League of Nations and in the World Court. Starting in 1935, Congress passed a series of Neutrality Laws calculated to keep the nation out of Europe's gathering troubles by making clear that it would take no part in any collective security effort or in halting aggression—no matter where that aggression might occur.

Antimilitary feeling ran so strong that Army officers stationed in Washington, D.C. wore civilian clothes to avoid raising civilian (especially Congressional) hackles. Even after Hitler invaded Poland in 1939 and President Roosevelt declared a national emergency, Congress only grudgingly authorized a piddling $12 million for new mechanized units, and an increase of a mere 17,000 men. Until Hitler overran Denmark, Norway, the Low Countries and France in the spring of 1940, legislators persuaded themselves that what they were seeing was a "phony war"; the President was so cowed by isolationist strength on Capitol Hill that he requested only modest increases in the defense budget. When France fell in June 1940, the War Department reported that it could field 5 divisions with a total of 75,000 men. Germany had 140 divisions—more than two million soldiers.

Maneuvers had been held in the United States in 1938, 1939 and 1940, and were widely regarded as a joke. In a 1938 "command post exercise" at Fort Knox, Kentucky, partly in order to save money, almost no troops or weapons were employed; only 500 Regular Army and National Guard officers participated. In the 1940 exercises, the invading and defending armies had just four real tanks between them—all others were trucks with "TANK" painted on the side. Machine guns were represented by pie plates labeled ".50 caliber" and pasted onto old Springfield rifles; antitank guns were lengths of drainpipe; hundreds of trucks and other "armored" vehicles were rented from civilian sources.

Most of America's ragtag soldiers were members of the National Guard, and their yearly allotted two weeks in the field revealed little more than the inadequacy of their training, discipline and physical condition. Men collapsed from exhaustion, wandered aimlessly hither and yon. Officers issued unfathomable orders. Brigade and division commanders were incapable of coordinating their units and weapons. Communications were abominable, supply often nonexistent. It was out of such material that General Marshall now had to forge a real army.

Fortunately, the make-believe weapons and public displays of ineptitude helped convince Congress to induct some 300,000 National Guardsmen and Reservists for 12 months' service, and to pass a Selective Training and Service Act, on September 16, 1940, initiating the first peacetime conscription in American history. Some 900,000 men were drafted—but, Congress made clear, only for a year.

Meanwhile, George Marshall picked Lt. Gen. Lesley McNair to train the troops and fighting units. At 58, McNair had nearly 40 years of service behind him, as well as a solid conviction that "our Army is no better

than its infantry." He had also developed a plan for building a division from scratch and then creating an army of 200 or more divisions.

What soon became apparent was that even more serious than the lack of troops was the lack of officers capable of leading them. In the peacetime Regular Army, promotion depended largely on seniority. When a command became vacant, the next man in line normally slipped into the job, whether or not he was qualified. In the National Guard divisions, top officers were, more often than not, political hacks. But whether regulars or guardsmen, incompetent officers hung on, blocking talented younger men from advancement. And because movement from one rank to the next was glacial (Marshall himself waited 31 years for his colonel's eagles), many officers remained in a junior grade so long that when they finally made colonel or brigadier general they were woefully unprepared to take on the responsibilities expected of them. One of every five first lieutenants in the National Guard was more than 40 years old; 45-year-old West Point graduates were still captains; some 4,200 World War I-vintage officers had spent their entire postwar careers between the ranks of captain and colonel.

General Marshall was determined to locate ingenuity and brains at whatever level they existed; making room for them meant getting rid of officers nearing retirement age. "Leadership in the field," he said, "depends to an important extent on one's legs, and stomach, and nervous system, and on one's ability to withstand hardships, and lack of sleep." He urged passage of a bill that would shorten the process of removing officers.

To replace old-timers, Marshall turned repeatedly to his "little black book," in which he wrote the names of men who had impressed him or who had been recommended by someone whose judgment he respected. As early as 1939, during an interview with military writer Maj. George Fielding Eliot, he pulled the list from a desk drawer, revealing that he had his eye on such officers as Omar Bradley, Mark Clark, Lawton Collins, Jacob Devers, Dwight Eisenhower, Courtney Hodges, George Patton, William Simpson, Lucian Truscott—men who would prove themselves as leaders of a force that expanded from 188,000 in 1939 to more than eight million, six years later.

It was soon clear to all officers—regulars, guardsmen and reservists—that their careers depended on how they performed during the coming war games. Besides, the maneuvers, particularly the huge Louisiana exercises, by focusing attention on the Army's weaknesses, notably its shortage of equipment, would impress Congress and the American people with the necessity to beef up the Army.

George Marshall was generally the soul of civility and restraint, but when a Senator objected to the amount of money to be spent on maneuvers, complaining about mistakes made by troops in war games, Marshall burst out: "My God, Senator, that's the reason I do it. I want the mistake [made] in Louisiana, not over

A drenched column of Blue soldiers from 151st Infantry Regiment moves up along road near Kurthwood to support an attack on Reds. The rifles most men had during games were not the new Garands but only bolt-action Springfields.

Being led by a jeep with soldiers in gas masks, motorcycle troops of the Red 2d Armored Division thunder forward on a road just cut to bypass a bridge previously "destroyed" by Blue demolition squads.

in Europe, and the only way to do this thing is to try it out, and if it doesn't work, find out what we need to make it work."

The timing of the exercises was crucial. By July 1941 the Army would reach a strength of 1.4 million, but whatever training those men were to get they had to get quickly, because the National Guard was scheduled to begin demobilization on September 15, and the first lot of draftees would go home as their year's hitch expired. All summer the word "OHIO" was being scrawled on walls near military camps; the letters stood for "Over the Hill in October," putting an already nervous Washington on notice that mass desertions might occur if the draft were extended. Even so, on July 22 Marshall was still pleading with Congress to do just that. "An emergency exists," he warned, "whether or not the Congress declares it. I am asking you to recognize the fact that the national interest is imperiled."

As far back as November 1940, General McNair and a young deputy, Lt. Col. Mark Clark, had begun planning army-versus-army maneuvers in Louisiana. In these "free" war games, GHQ (General Headquarters), acting as the command for both sides, would supply each opposing general with basic intelligence about his enemy and assign each a mission that he was free to achieve in any manner. The exercises were to be continuous, day and night, until one side won. And they were to be as realistic as possible: blank ammunition (though never at a range of less than 20 yards), practice land mines, and roving sound trucks to broadcast recorded battlefield noises.

Success would be determined by about 1,800 umpires, for whom McNair had a new 31-page manual written, covering every conceivable contingency. When the two sides met and engaged in battle, the umpires would decide whether demolition crews had "blown" a bridge, how many tanks had been "destroyed," how many planes "shot down," how many infantry "killed or captured"—and then judge, partly on the basis of tactical position, but mainly on the basis of firepower, which unit had won a particular skirmish or battle. The winner then got to advance; the loser retreated. (A participant recalls the umpires stopping at the end of an infantry skirmish and saying, "OK, you just lost ten men, so retreat.")

Prior to the Louisiana exercises, during smaller corps-strength maneuvers in Arkansas and Tennessee, vehicles knocked down farmers' fences and damaged crops. The battle for Tennessee was delayed because no safety pins were available for fastening colored ribbons to hats in order to identify the opposing armies (fortunately a Connecticut manufacturer came to the rescue with 80,000 pins). Much of the armament had to be simulated. Reconnaissance and communications were especially weak. One general criticized his troops' "stupid disregard" of air attacks. But there were positive achievements, at least one of them unexpected: it was discovered that tiny Piper Cubs and other lightplanes—which could land in a pasture, taxi on a road and be concealed under a tree—were capable of dramatically expanding an army's vision. Piloting the planes on scouting missions were civilian salesmen, who

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M-2 medium tanks kick up dust as they roll through town, after putting a 75-millimeter gun out of action.

Row of sound trucks parked in the fighting area adds realism by broadcasting earsplitting sounds of battle.

Tank meets 75-millimeter gun as umpires (flag, right) decide which of them would have destroyed the other.

gave officers a sales pitch each time they took one up.

During the summer of 1941 Congress finally authorized a review procedure by which Regular Army officers could be removed from the promotion list, and extended the term of service for guardsmen and draftees. Both actions came only after hard-fought battles on Capitol Hill, especially the one to extend the Selective Training and Service Act, which was fiercely opposed by isolationists in general, America Firsters en bloc, pacifists, and Roosevelt's Republican enemies. When the vote came on August 12, 1941, it passed the House of Representatives by a count of 203 to 202. So, by a single vote, with the world two years into a global war, the new U.S. Army was not disbanded.

The purpose of the second phase of the Louisiana maneuvers was to discover whether a small Red force could, through imaginative defensive planning and action, hold out against a Blue Army that had been made superior in every respect except air power. But Marshall and McNair needed answers to a host of other questions, too. The American high command had watched in 1940 as the German Wehrmacht gave the world a new word, *blitzkrieg*, and put an entirely new face on warfare—tanks, dive bombers, speed, flexibility, unpredictability and momentum were now essential. Yet the U.S. Army was still mired in World War I thinking and tactics.

"The greatest sham battle in U.S. history"

In an attempt to remedy that, 472,000 Americans, mostly new to soldiering, struggled and fought for a total of ten days on 30,000 square miles extending from Shreveport to Lake Charles and from Jasper, Texas, to the Mississippi River. The 3 incomplete but functioning infantry divisions of 1939 had swelled to 27; of these, 14 took part in the Louisiana maneuvers. Two armored divisions were on hand, plus eight Army aviation groups, and eight squadrons of Navy and Marine planes. A *Time* reporter termed it "the greatest sham battle in U.S. history," and it certainly was that. As the fortunes of the two armies seesawed back and forth, the men endured the worst possible weather, long hours in the open and the rigors of simulated combat.

Sometimes it was a kind of lark; sometimes it was frightening. John Eals, then a first lieutenant in the 32d Infantry Division (Blue team) remembers that everybody took it as "just another training mission. No one thought we were really going to go to war." Men were more worried about coral snakes, ticks and chiggers (the latter not always restrained by flowers of sulfur in a bedroll).

Real tragedies occurred, of course. The first day, four men were killed in a traffic accident. (By the end

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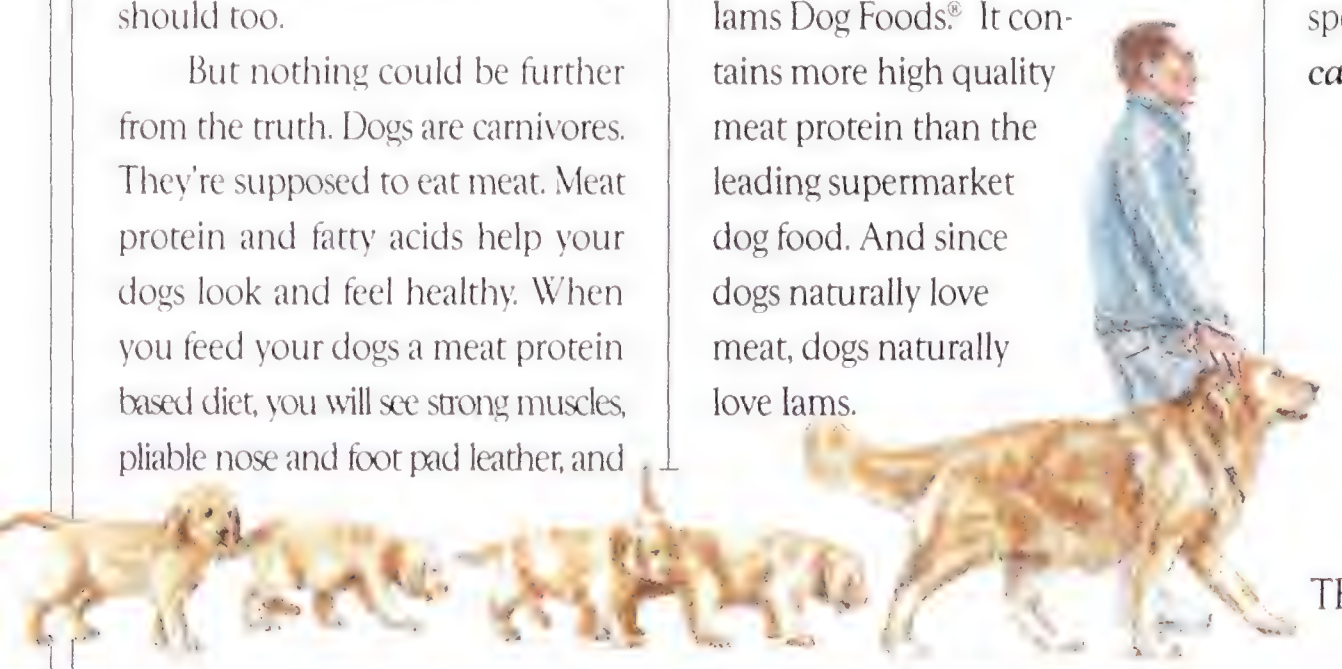

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Between bouts of fighting, new soldiers of the 38th Division briefly flake out at nearby Camp Polk. Until the month before, when the draft act was renewed (by one vote), most men were due to be discharged in late '41.

of the first week, 17 soldiers had died—three more in traffic accidents, two by drowning, two from disease, five in plane crashes and one by his own hand.) As the maneuvers' second phase began, hurricane flags were flapping along the Gulf Coast, and the New Orleans weather bureau was predicting 75-mile-per-hour winds. The *New York Times* reported that the red clay roads were "slick with water . . . streams were muddy torrents; rivers raging floods, bayous swollen," clogged with dead branches and mud. Wind and sheets of rain tore tents apart and washed soldiers out of their bivouacs. A reporter assigned to the 2d Army watched as two dirty, wet, foot soldiers who had slept on the ground in pup tents passed a general's trailer in the pine woods. "Gee," one of them said, "lookit, the general's roughing it. He's got two windows open."

Local folk were understandably wary of property damage by troops. In midmaneuvers, one loyal but pragmatic farmer wrote the military: "Before the army came I had 160 chickens and now I have sixty. I am not asking payment for the 100 that disappeared but only protection for the sixty that remain."

For this round, General Lear's assignment was to fall back from a position south of Shreveport to defend the city against Krueger's attack, and he set about it in a maddeningly methodical manner that frustrated the enemy at just about every turn. In this bayou country, the drenching September rains turned the terrain into a quagmire and the maneuver into a contest between engineers. For five days, Red Army engineers and a rear guard of Maj. Gen. John Millikin's 2d Cavalry Division remained far behind the main body, laying tank barricades and thousands of mines, blowing up 2,000 bridges in the path of the oncoming Blue force.

To make sure the demolition work was properly handled, umpires inspected each fuse, calculated the necessary amount of explosive needed and allowed no bridge to be closed unless simulated TNT had been properly planted. But there was always the human factor to be reckoned with. Years later, Dwight Eisenhower, during the maneuvers a colonel and the Chief of Staff of the Blue Army, liked to tell the story of an umpire who had marked a bridge "Destroyed" and then saw a squad of men crossing it. "Hey," he yelled, "don't you see that bridge is destroyed?" To which a corporal replied, "Can't you see we're swimming?"

Soaked to the skin, plastered with mud, the weary engineers of the Blue Army threw up pontoon or log bridges alongside spans that had been designated as destroyed, removed mines, knocked down tank barricades—anything to get the columns of armor and infantry moving again.

By the third day, after what was reported as "bitter hand-to-hand fighting along the central front," the advancing Blue infantry had pushed the Reds back to within 50 miles of Shreveport. At that point, however, the demolition work by Lear's engineers paid off, stalling Krueger's forces in the swamps of the Sabine River valley, which were impassable by armor. Trying to cross the river near Carthage, south of Shreveport, the Blues found that everything usable had been destroyed or flooded. Col. William Morris, commander of the 66th Armored Regiment, learning of a ford downstream, led his regiment down a dirt road and

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Umpires (with flags) halt an infantry skirmish to work out the results. Some 1,800 umpires were on hand, deciding who won each action, mainly on the basis of firepower. The winner took over disputed ground.

ran into a firefight that held him up for two hours. Morris called for artillery support and then had to wait for the umpires' decision as to whether he could advance or not; by the time he had been declared the winner, the river had risen so much that the contested ford was impassable.

Maj. Gen. George S. Patton had already led his 2d Armored Division on a 300-mile end run through Texas in order to outflank the enemy—a daring movement planned by Eisenhower. Arriving at the back door of Shreveport, some of Patton's units attacked the Reds' airfield, while others seized the city's waterworks, but to no avail. The Blues' main force had only pushed to within 25 miles of the city. Lear, moreover, still had the 6th Infantry Division and the bulk of his armor in reserve. General McNair declared an "armistice." The Red team claimed victory, but it was ambiguous; the high command was annoyed that Lear had done so little fighting to achieve it.

During the weeks immediately after the Louisiana maneuvers, a U-boat sank the U.S. destroyer *Reuben James* in the Atlantic; a hard-line military government took over in Tokyo. Moscow seemed about to fall to the Germans. Against that background, in mid-November, the last of the series of what turned out to be prewar games was held in the Carolinas. Maj. Gen. Oscar Griswold opposed Lt. Gen. Hugh Drum in a test to see whether defense, with the accent on firepower and mobility, could stop tanks. (It could—and did.)

After that, it was time for the reckoning. There was some good news. General McNair felt the troops had demonstrated that they were in prime physical condition and had shown an ability to move and fight effectively (on occasion) in complex tactical situations. He singled out for special praise the pontoon engineers and parachute troops, a cavalry division and several air force units. The effectiveness of supply, he noted, "was an outstanding feature." But too few units had made any attempt at concealment from air attack; highways were constantly congested; reconnaissance and security were generally poor; troops on the defensive failed to dig trenches.

McNair's sharpest criticism was reserved for officers. There was no question, he said, that weaknesses are "repeated again and again for lack of discipline. . . . A commander who cannot develop proper discipline must be replaced." Discipline was not the only problem. Orders were frequently too complex or unintelligible and reached addressees too late for action. Artillery units were allowed to remain idle. Divisions failed to concentrate: in the first phase some divisional fronts had extended more than 25 miles.

"War correspondents" accompanying the armies had observed the casual behavior of many officers in what was supposed to be a battle, the listlessness of soldiers obeying commands, the officers who were drinking

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A war games star, Col. Dwight Eisenhower (with taller Mark Clark) was promoted for brilliant battle plan.

off-duty with enlisted men. When a reporter asked if the Army was ready for war, McNair replied, "They are trained better than were most of our troops when they entered the line in France during the World War—which is not saying too much."

What, then, had the 1941 maneuvers achieved? Despite General McNair's stubborn insistence that the antitank units in which he placed such faith had "won," and that the Army should have them in abundance, much uncertainty remained about the efficacy of tank-destroyer battalions—doubts that would soon be confirmed in real battles in North Africa and Europe. Paratroops were dropped four times during the war games, but on a scale so small that no real conclusions could be drawn.

Ground support by aircraft remained a problem. The command of the Army Air Forces was determined to preserve its independence and what it saw as its real mission—strategic bombing. Airmen argued that close cooperation would put aircraft under the control of ground forces and was neither practicable nor necessary; not until 1944 did they admit that such cooperation with ground troops was an essential mission.

On the positive side, 740,000 men—27 divisions, three armies and nine air groups—had participated in one or more of the maneuvers. Though it was late in the game, the United States had an army with field and simulated combat experience before it went to war.

Many officers' careers were made, others' broken. McNair was blunt on this topic, too. "A lot of these Generals who want to fire their Chief of Staff ought to fire themselves," he reported. "We're going to start at the top and work down. We've got some bum Generals, and maybe I'm one of them, but we're going to weed them out. Have we the bright young Majors and Captains to replace them? Yes." Among many others, young Colonel Eisenhower, highly praised for his performance as Krueger's Chief of Staff, was promoted to brigadier general as the maneuvers ended—the start of an astonishing career. Two years later he was Supreme Commander of the Allied Expeditionary Forces, which would invade Europe.

McNair made good on his threat. Before the Carolina maneuvers even began, seven of nine corps commanders were replaced; two others were casualties under the age-62 retirement policy. McNair gave Marshall a critical review of division commanders, praising many, condemning others. Comments like "dubious prospect," "should go out for more than age," "no question that he should go" and "incompetent" were frequent. Of 42 army, corps and division commanders who participated in the Louisiana maneuvers, only 11 got significant combat assignments during World War II.

Late in the year, Secretary of War Henry Stimson summoned Marshall and his three deputy Chiefs of Staff—Henry (Hap) Arnold, who also commanded the Army Air Forces, McNair and Clark—to meet with him to evaluate the lessons of the 1941 maneuvers. The designated topic was the critical need for improved basic training and the training of small units in 1942, but it seemed that not much could be done. President Roosevelt had just decided to reduce the ground forces in favor of the Navy, the Air Forces and aid to beleaguered Britain, which meant that Marshall and McNair might have to discharge National Guard divisions in February and create new divisions made up of raw draftees to replace them.

When the meeting adjourned, a group of worried men left Secretary Stimson's office, their thoughts on all that had to be accomplished before the Army could possibly be ready for war. That was on Wednesday, December 3, 1941. Fewer than 96 hours later, Japanese bombs began falling on Pearl Harbor.

Before the games, tank general George S. Patton, another star, struck his soon-to-be-world-famous pose.

By Elizabeth Stone

There's more to stage lighting than meets the eye

And nobody knows that better than Jennifer Tipton, whose toolbox includes half-hats, gels and a quarter-million watts of electricity

It was a cold winter Thursday, part of a busy week in a busy year for lighting designer Jennifer Tipton. Two days earlier she had flown to New York just for the day (from Minneapolis, where she was in the middle of lighting *Medea* at the Guthrie Theater) to focus the lights for *Henry IV*, making sure each one was working and pointing where she wanted it to point.

Now this morning she was back in New York, coming to the Public Theater straight from the airport, still wearing the boots she had needed to hike through the Minnesota snowdrifts. A practiced itinerant, she took her work smock with the holly-leaf print (neatly folded to doorknob size) from the pencil case where she also keeps her spoon and heating coil, and put it on. Then she put her bag on a worktable set up in the orchestra section and stowed the rest of her luggage under one of the seats.

Soon Tipton, director JoAnne Akalaitis and set designer George Tsypin were beginning their first day of "tech rehearsals," during which lighting, acting, sets, costumes and sound are all coordinated—final adjustments made and snags unsnagged. After watching Prince Hal and Falstaff rehearse the scene where they awaken after a night of carousing, Akalaitis felt it needed some lighting changes.

A study in subtlety herself, Jennifer Tipton takes a minimalist approach to theatrical lighting design.

"It looks totally weird for Hal to pull open the window and have nothing happen," said Akalaitis.

"That's because I have nothing focused there," answered Tipton. "You want something?"

Akalaitis wanted something. What were her options? Maybe, said Tsypin, a lighter-color material could be placed behind the window, so a light could shine through? Or maybe, said Tipton, when Hal opened the window, some lights already on in front and overhead could be brightened? "To be discussed further tonight," said Akalaitis.

Tipton would be back the next day, and the next day, and for days after that, until the play was beyond previews, into its regular run. But at the same time, she would also be refining the lighting for *La Bête*, which she had lit in Boston the previous month, and which would now have to be adapted to the Broadway theater it would be moving to. Then, later on in the month, Tipton would also go to Minneapolis to work on lighting for *Brace Up!* with the experimental Wooster Group.

At 53, Jennifer Tipton is one of the most respected and busiest lighting designers here and in Europe—in dance, theater and opera, acclaimed with Tonys, Drama Desk Awards and more for her work, which includes lighting designs for Mike Nichols' production of Beckett's *Waiting for Godot*, *Jerome Robbins' Broadway*, and Andrei Serban's production of Chekhov's *The Cherry Orchard*.

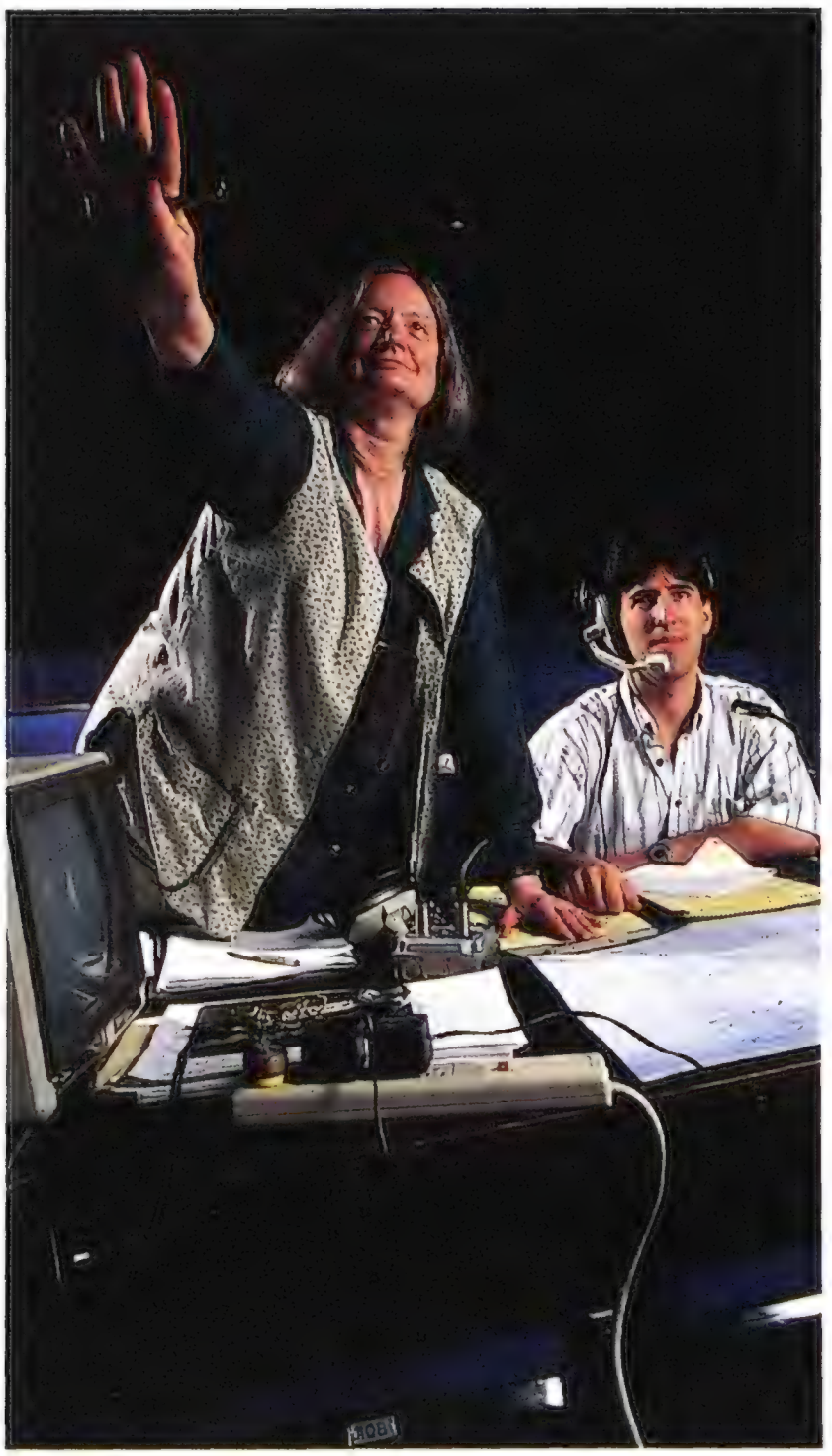
She's had to learn to travel light

During this past year, when she wasn't in New York or Boston or Minneapolis, work also took her to Hamburg for Robert Wilson's *Parsifal*, to Toronto for the National Ballet of Canada, and to London for choreographer Dan Wagoner's work. That's not counting her directorial debut next month—with *The Tempest* at the Guthrie Theater in Minneapolis. Or her long-term association with Yale. Since 1981 she has taught regular Monday classes there. She also designs the lighting about once a year for a production at the Yale Repertory Theater, most recently for *A Moon for the Misbegotten*, which had its run this spring.

Tipton's first love is dance—and over the past 25 years, with two Bessies to show for it, she has lit choreography by Mikhail Baryshnikov, Robert Joffrey, Jerome Robbins, Paul Taylor and Twyla Tharp, among others. According to costume and set designer Santo Loquasto, who often collaborates with Tipton and Tharp, "What I find in Jennifer's work, and often miss in other people's, is how she moves a piece along onstage. She knows how to punctuate movement in light, create a narrative line for the action."

Paul Taylor has worked with Tipton for 25 years,

Photographs by Jonathan Atkin



At Yale Repertory, Tipton gives lighting instructions during tech rehearsal of *A Moon for the Misbegotten.*

and yet he doesn't quite know how Tipton does what she does. "Sitting next to Jenny when we're at the dress rehearsal, we really don't discuss the piece," he says. "I'll be looking at the dance to see if anyone's too crowded, or if the set is OK. Meanwhile, Jenny sits there with a piece of paper and she watches, drawing these pictures about who does what when. I might say, 'Could we have a blackout?' or 'How about a fade-up?' And if she thinks I'm right, she'll let me."

But Taylor says Tipton doesn't always think he's right. "Jenny usually lights on the dark side," he says, "and once I did something I thought was a comedy," which, commonly, is brightly lit in warm tones. "I couldn't see the dancers' faces, so I said, 'I wish we could see the dancers' faces.' 'You want me to turn it up?' she said. 'Oh, would you please?' I said. She did, but she said, 'Don't use my name on the program!' "

Light itself is mysterious, inseparable from what it makes visible. In the natural world, though light fosters sight, it is neutral on matters of meaning. Theatrical light, entirely unnatural, fosters sight and insight; it is a subliminal whisper, providing emphasis, telling us what to make of what we see.

Designers talk about their "palettes"

How does Jennifer Tipton work in such an elusive medium? And how did she come to choose it? If what she does is an art, can one talk about the quality of her light as one does with, say, Claude Monet or Edward Hopper? In painting—or music—the modesty of the equipment is a perfect foil to the grandeur of the result, but with lighting, the instrument isn't a harp or a paintbrush, it's more like a Con Edison plant.

Indeed, though lighting designers talk in delicate, painterly terms about their "palettes," their technical plans for a production can be as complicated and detailed as any architect's or engineer's. As a beginning, Tipton watches rehearsals, talks with the set designer and director about the ideas underlying the production, and looks at the capacities of the theater where the production will be mounted.

"For *Henry IV*," says George Tsypin, "the three of us—JoAnne, Jennifer and myself—got together. I had already made the model, but everyone thought the design was too big and complicated," he says with a good-natured shrug, "and Jennifer said yes, it was, so I had to change it. Jennifer gets involved in a production very early. She's the only lighting designer I know who can do that."

Every production has its own way of proceeding. Take *La Bête*, as a case in point. It is a play about a 17th-century French playwright, Elomire, distraught because his patron, Prince Conti, wants to bring a vulgar, mediocre street player, Valere, into Elomire's

On the set at Yale Repertory, Tipton works with a stagehand—up on the ladder—who is adjusting a Leko lamp to simulate a sunrise. Tipton designs one show a year at Yale so her students can learn the process.

acting troupe. For that production Tipton knew, from conversations with director Richard Jones and set designer Richard Hudson, that the conflict between the artist, Elomire, and the philistine, Valere, would be reflected visually. Act I would have what Jones called "very pure" light—Elomire's light, white light—with the introduction of colored light in Act II, green-tinted for Valere, lavender-tinted for Prince Conti.

With that conversation and the theater's dimensions in mind, Tipton sat down at her drafting table to draw a lighting plot, a blueprint about the size of a roadmap. It showed the electricians how many lights she wanted to use (in this case, 250) and their precise placement, and it specified various combinations of these lights, each called a "channel." A channel might consist of one light or a group of lights, and each can be used individually or in combination with others.

In drawing up the plot, she had many different kinds of lights to choose from: the Leko, used most frequently because its beam can be most closely controlled, comes in a variety of beam widths and intensities; the Fresnel, which provides a softer wash; the PAR can, which provides bright light with a lot of punch; and the follow spot. The lighting plot also specified other accouterments—gels to add color; "doughnuts" to make the beam's edge sharper, frosts to make the beam's edge softer; gobos to cast shadows of clouds or trees or people or cityscapes; half-hats to keep light out of the audience's eyes; "barn doors" to help sculpt the beam.

For the intense color needed in *La Bête*, Tipton made two provisions. She included in her lighting plot ten color scrollers—each of these attachments can rotate up to nine different colored gels in front of a lens. And she indicated which lights were to have individual gels—in purples, blues and greens—inserted in front of their lenses. She already had her favorites, but like any lighting designer, she also had access to commercial gel swatch books from Rosco, Lee and Great American, which contain samples of hundreds of transparent tints in various colors.

Elizabeth Stone teaches journalism at the Lincoln Center Campus of Fordham University in Manhattan, and writes frequently about the arts and education.

By the time Tipton showed up in Boston for her first day of work at *La Bête*, the lights had been hung according to her specifications in 11 different locations—on the front house truss, hoisted 27 feet up in the air to the orchestra ceiling; on the balcony rail; on a matched set of 20-foot-high vertical booms in each wing offstage; on box booms in the first and second balconies, and so on. Onstage there were also several "practicals," stage lights that are part of the set design, in this case a half-dozen wall sconces and a chandelier.

So there Tipton had stood that first day, in her holly-leafed smock, on the stage of a very dark theater, ready to begin. "Focusing," or pointing the lights where she wanted them to point, was her first order of business, and she had a quarter-million watts at her disposal. Backstage, an electrician was seated at a computerized lighting board that controlled the channels.

"Particularly in lighting, the craft is so dirty, somehow," said Tipton that day; she was wearing a sweatsuit under her smock, and running shoes. For this phase of the lighting process at least four people were required: Tipton and her assistant Scott Zielinski, wearing a headset and holding a clipboard; the electrician backstage at the lighting board, also wearing a headset; and at least one stagehand, but sometimes as many as six or seven.

Riding atop a cherry picker on wheels

The stagehand was the only one to handle the lights physically. Sometimes, depending on a light's location, he merely had to climb a few rungs on a ladder to get to it, but sometimes, for the booms in the wings, he needed to be up in the air in a lift, a cherry picker on wheels, with a handful of hefty colleagues down below as ballast. For the 50 feet or more of lights stretched across the width of the orchestra ceiling, he sat on a "focus chair" 30 feet up in the air, rigged on a truss bar alongside the lights. From that vantage point, the stagehand could slide back and forth across the width of the theater.

The process of adjusting one light began with Tipton telling Zielinski, a former student of hers at Yale and now a lighting designer in his own right, which channel she wanted. "Give me 179," she told him that first morning, an instruction that he repeated over the headset to the electrician backstage. The electrician in turn punched the command into the lighting board, which sent it out through the control cable.

And then there was light. A thousand watts with just the faintest suggestion of pale lavender.

The purpose of channel 179, which happened to consist of only one light, a spotlight, was to emphasize the shadows of the actors on the set wall behind them. Tipton walked over to the wall, stepped into the beam

On the set of *A Moon for the Misbegotten*, Tipton looks over effect of Fresnel light shining through window.

Holding a blue plastic gel up to the light, she checks to make sure that it's not burned out at the center.

Inside house facade on stage, Tipton tells student Lenora Brown how to position and focus Fresnel lamp.

Tipton takes a break on the set to talk lighting with student Lynne Chase, technician for *Moon* production.

Carrying the lighting plot with her, Tipton asks for constant adjustments in the process of fine-tuning.

Don Titus, master electrician at Yale Rep, knows the tools by heart and works closely with the designer.

of light and held her palm horizontally, ten inches above her head. "OK, light up to here!" she called out. The stagehand moved the fixture so that the beam was primarily aimed at the wall up to her hand.

Tipton is reserved and softspoken, but her work at this part of the process often called for shouting, especially when the stagehand was airborne and the carpenters were hammering with particular zeal.

"Sharpen the edge!" The beam's edge got more sharply defined, seeming bluer.

"Good, now cut along the floor!" Manipulating the shutters inside the light, the stagehand sliced away the bottom of the circle, so that it stopped abruptly at the juncture where wall meets floor, not spilling onto the floor at all. Satisfied so far, Tipton asked that the other channels for this cue be turned on.

"Now put frost in!" she directed, meaning a translucent plastic sheet placed in front of the lens so that the edges of the light would soften enough to blend with the adjacent light beams—also frosted—in a wash.

"Now lock it!" She squinted up, looking directly into the beam, then scanned the stage. "Looking good!" she yelled to the stagehand, though one suspects this phrase is not part of her natural idiom.

Marking the stage floor like a graph

Meanwhile, Zielinski functioned as the recording secretary, noting in a variety of ways what went on with each and every light. On his clipboard were focus charts—dozens of legal-size sheets, each one containing a half-dozen schematic representations of the set. When Tipton had channel 179 turned on, Zielinski wrote the number at the top of one of the representations. Then when the beam was adjusted to Tipton's satisfaction, he sketched its shape and location onstage.

To make Zielinski's job easier, the stage floor had been marked with tape as if it were the axis and ordinate of a graph—with one long strip of tape notched at one-foot intervals, running from upstage to downstage, and another long strip, also notched, running from stage left to stage right. The representation on his clipboard also included axis and ordinate.

So, for channel 179, Zielinski could mark an X at the coordinates—at six feet stage left, seven feet upstage—where the hot spot hit, then sketch the beam's shape on his scheme, using the notches to help him place it. That way, if a light slipped, or if someone wanted to replicate the lighting arrangement in another theater after Tipton was gone, there would be accurate references. When all the focusing was completed—a process that took ten hours—Tipton made up a "magic sheet," a quick, one-page summary of her overall plan, to be left behind with the lighting plot and focus charts.

Watching Tipton work, as she certainly knows, is

Along the back wall of the *Moon* set, reeds are backlit so they will be silhouetted when seen by audience; stagehands adjusting lights await instructions from Tipton, looking on from seats.

nothing like watching a painter paint. "There are all these cables and lights and numbers and things that have nothing to do with what you're really doing," she says, "which is putting light on the stage and making a composition both in space and in time."

Tipton herself isn't quite sure how she discovers her own artistic intuitions. "I've always thought of myself as literal-minded, of having to get through this literalness—the dirty craft of it—to find out what my intuition is. There are many ideas. They're all light ideas. There's white light. There's colored light. There's light along the walls. There's light from the front. There's light from the side. There's light that lights the heads. I'm playing with all of those things, and I'm responding with my gut."

She feels she is most imaginative when working collaboratively with a director, such as Mike Nichols ("He asks the impossible") or JoAnne Akalaitis, an expressive presence who calls her more-subdued friend "a brilliant listener." Working with Akalaitis on *Henry IV*, Tipton had influence that extended far beyond just lighting. During the course of the rehearsals, their conversations touched on multiple aspects of the production. Tipton was concerned over one actor's unintelligibility; she felt that the scenes which are supposed to exemplify "let order die" were not chaotic enough; she didn't agree with Akalaitis' decision to have the newly crowned Henry IV walk *above* the people, but agreed with her that another character's shoes just weren't right. Akalaitis' sense of herself as a director had her entering into lighting issues as well. "I'm glad we're changing those Fresnels," she said to Tipton. "They were so ugly." Replied Tipton dryly, "I put them there just so you'd be happy when I moved them."

Jennifer Tipton needed one assistant for *La Bête* and another for *Henry IV* because she was tending to both simultaneously, while preparing for *Brace Up!* But the stresses of getting *La Bête* onto the stage on time forced the director to rehearse the actors during tech rehearsals, which followed focusing. Usually, tech rehearsals are devoted to ironing out technical wrinkles rather than rehearsing the actors. And so, left at a greater distance from the director than is usual or pleasing to her, Tipton worked on.

By the fifth day on *La Bête*, Tipton was fine-tuning, making small changes in color, light intensity and angle; her concentration was remarkable, considering the tension level among cast and crew, as little whispering huddles gathered and dissolved. It was to be the day of the first preview, yet nobody seemed to know whether the curtain would even go up that night. Ron Silver, cast as the street player, Valere, had been hoarse the previous evening, and had just called in sick at noon. Rehearsals had not been going well anyhow. Would he show up? Would there be a preview? Tipton shrugged. "I just light what's in front of me. I don't see it, I don't light it."

She had been finding it hard to light Ron Silver's face anyhow. No matter what she did, it looked gray. "It's always the stars, somehow," she said, recalling one actor who was a "flusher," a light bulb unto himself, who turned pink at moments of emotion, making light that had been good for him no longer good.

Meanwhile, as part of daily upkeep, the foursome—

Some Resourceful Thinking

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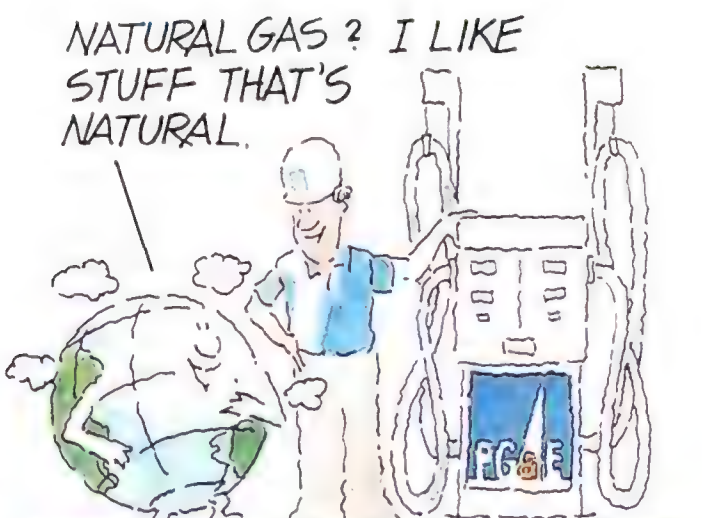

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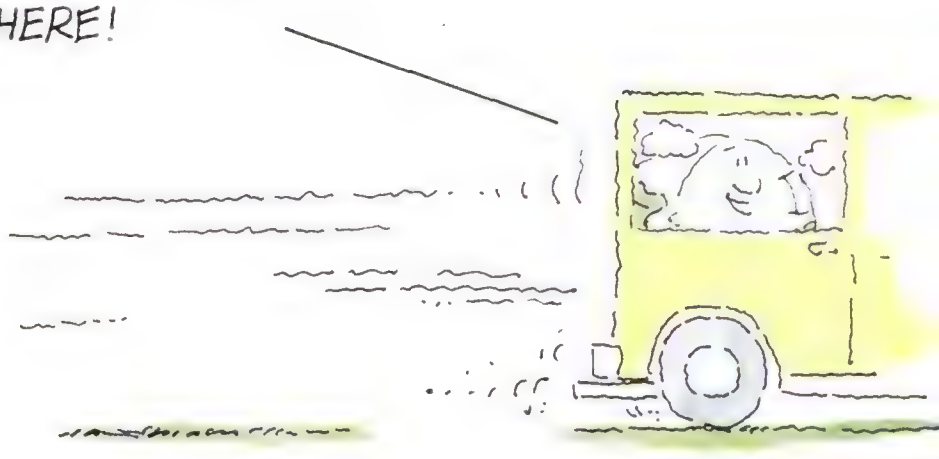

6

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Tipton, Zielinski, the electrician at the lighting board and the stagehand at the lights—continued to tinker. Today it was a threesome—Tipton and Zielinski sitting in the orchestra at her worktable, with two computer monitors telling her which lights were on and at what intensities, and the electrician sitting at the lighting board backstage.

"Kill 115 and 116," she said in the course of pruning. Nothing discernible to the human eye—or at least to most human eyes—happened. In extinguishing 2 of the 200 channels the total illumination had been diminished by as little as 1 percent, but Tipton knew exactly where those particular lights were pointing, and she contemplated the result for two or three minutes before deciding to bring them back on—"115 and 116 at 8"—at 80 percent of their intensity rather than the 60 percent they had been at previously. Over the next several minutes, she did the same with other groups of lights, in various permutations, killing and resurrecting. What was she doing? Though enormously articulate, Tipton does not answer questions like these well. "I was looking at the light," she said.

Looking at the light had not been of particular interest to Jennifer Tipton as a child; she wasn't especially riveted by seaside sunsets or certain slants of light on a winter afternoon. "No, nothing like that," she says. Instead, she recalls a high school science award for a project that tracked the light shed by alpha particles, and mentions that she's always been the sort who could assemble things without reading the instructions. She still subscribes to *Scientific American* and keeps up with the new physics.

Tipton stands in the hot spot of one of the lights to make sure the beam is landing where she wants it.

Tipton was born in Columbus, Ohio, the first of four children, and only daughter, of a zoologist father and physicist mother who led a fairly itinerant life as university professors. The family passed through places like Detroit, Michigan, and Tuscaloosa, Alabama—"We left there when I was 6 or 7. It was the only place I ever really felt a sense of belonging"—before settling in Knoxville, Tennessee, when she was in the sixth grade.

An enduring love of dance

"I've lived my life in packages, separate packages, rather than in a line," Tipton says. "In fact, it feels like I've had several other lives. I'm not very sensitive to history, even my own." She arrived at Cornell University planning to major in astrophysics, but left, in 1958, with a degree in English. If she loved English, she also loved dance. So after graduating she came to New York, joined a dance group called the Merry-Go-Rounders, which performed for children, and studied with Martha Graham.

When Tipton became rehearsal director for the Merry-Go-Rounders, she had to learn lighting as well. After taking a course, she apprenticed under Thomas Skelton, an eminent lighting designer for dance and theater. In doing so, Tipton established a rather aristocratic lighting lineage for herself. Skelton had once worked with Jean Rosenthal, now regarded as the first modern theatrical lighting designer. "Jean was the first to *design* light," says Skelton. "She was the first to read the text, to think of light as a comment on the text." Rosenthal, in turn, had studied under Stanley McCandless, an electrical engineer who was a professor at the Yale School of Drama. Using an earlier incarnation of the lighting board, McCandless systematized stage lighting, making control of a large number of lights possible. "Before McCandless," says Skelton, "it was mostly just borderlights, footlights and a follow spot manned by an electrician."

Tipton was fast to learn her craft. "Jenny wanted to learn; she had imagination and a very strong dance background," says Skelton. Because he was so busy, Tipton was soon on the road with the Paul Taylor Dance Company as his stand-in. "One of the greatest things to me about Jenny," Skelton recalls, "was that she understood my vocabulary. She could light my work as if *I* had lit it—even when they changed the number of lights, or the kinds of lights, or the choreography. She could fool even me."

Having mastered imitation of a worthy model, Tipton went on to invent herself. By 1965, she was already working with Taylor on her own, as well as

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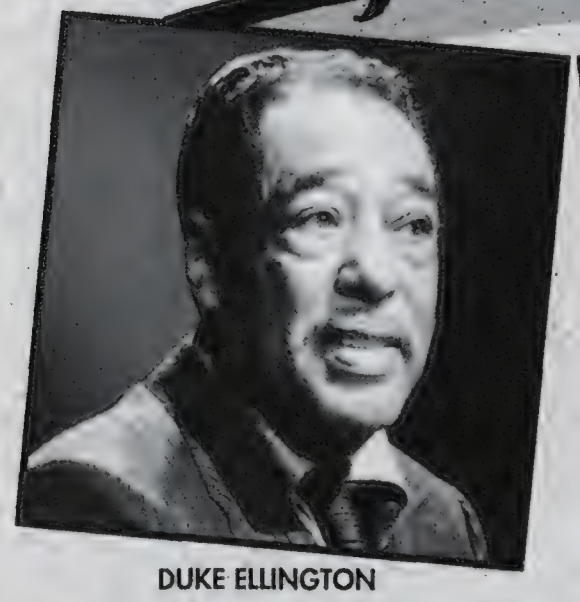

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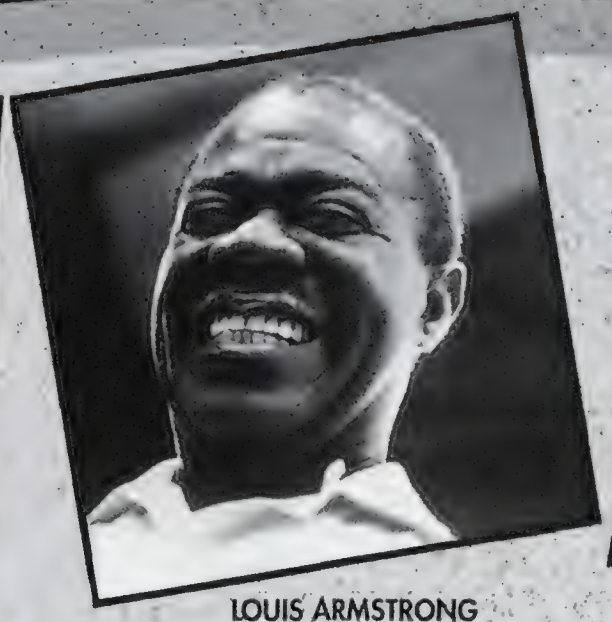

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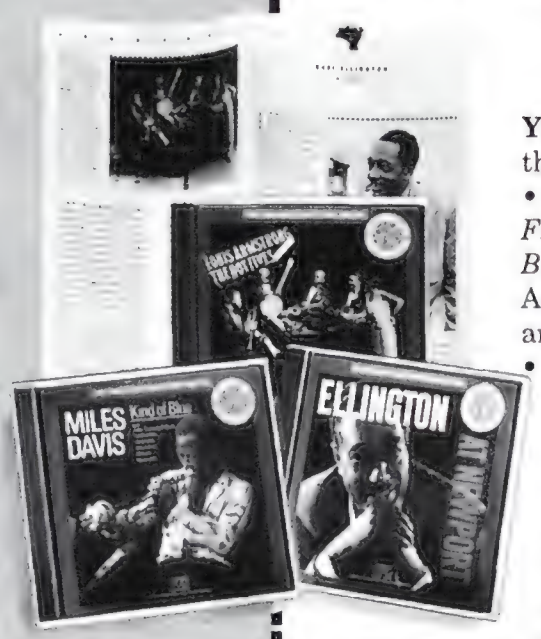

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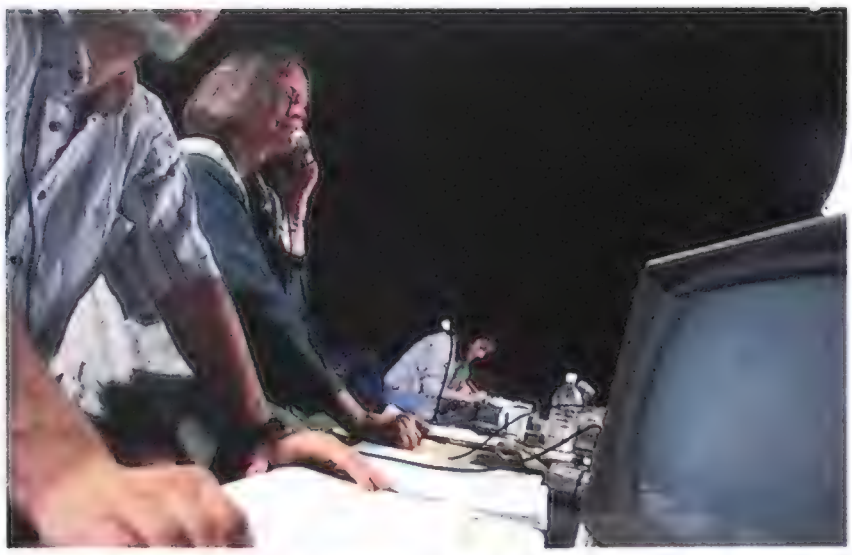

At her worktable facing the stage, Tipton talks via headset to electrician at computerized lighting board.

with Twyla Tharp. "We don't light the same way at all," says Skelton. "I'm a big brown dog, and she's an elegant Pekingese. She's refined, cerebral. And I'm not. I'm committed and bold. So our use of color is quite different. She tends to use a limited palette. If I were to choose what I would call a warm color, I would choose magenta or amber or mauve. And Jenny would choose white light. If I were to choose cool colors, I would choose blue or green or blue-green or turquoise. Jenny would use the palest possible blue, or a tint of steel blue, like a fluorescent light."

The color question is one that always comes up in discussions of Tipton's work, even among those who wholeheartedly admire her artistry. A production specialist employed by a large, long-running Broadway musical whips out a few gel swatch books and singles out two blues and a purple. "L161, L201, R54—she uses these all the time. They provide a very clean look, but sometimes they're wimpy."

Says designer Santo Loquasto, "Jennifer is enormously gifted, but there are certain things that less-talented lighting designers do better. There is a kind of Broadway lighting—flashy, upbeat lighting—which is often appropriate but which she finds a little glib. There are times when you want a kind of juiciness, which she is not interested in providing."

When it comes to Broadway, Tipton says there's not much there that interests her, and musicals don't at all. But when it comes to color, Tipton has a definite point of view. "There has to really be a reason, in my mind, for the light not to be white," and those times, she asserts, do indeed come up.

"In *Henry IV, Part I*, I felt very strongly that there should be a sense of color. There are three worlds: the court world, and that's blue; the world of Hotspur, which is lavender; and then there's the world of the tavern, sort of a salmony, amber color. I wanted it warm, but sickly warm, so I lit it with a hint of yellowish-green to suggest sodium vapor light."

With *Henry IV*, or any other play, did Tipton refine the lighting until it became identical with what was already in her mind? Or did she simply keep at it until she got to something that felt right? Who knows? Perhaps not even Tipton, who may be too busy working to watch herself work. But some moments in *Henry IV, Part I*—especially the tavern scenes—had the busy gold-and-amber feel of Bruegel's community scenes, while others, in *Part II*, have the brown-and-burdened feel of late Rembrandts—men of power, seated and standing, their faces half eclipsed by shadow.

Tipton has the reputation of keeping her cool amid the chaos that precedes all openings, and the day of the first *La Bête* preview was no exception. A run-through was scheduled for the afternoon; the evening performance would play to an audience. "What I'm most grateful to Jennifer about during this period," said Duke Durfee, the scenic supervisor, "is that she's not panicking. She's a professional." (Choreographer Jerome Robbins, with whom Tipton frequently works, has referred to her as "The Buddha.")

Eventually, with Ron Silver's understudy filling in for him, the run-through commenced, with all the elements of the production being cued, really for the first time. There were interruptions and bumps, missed lines, moments in the dark.

Even his words had a certain angularity

But something now happened, even without an audience, even without a preview. Actors, set, costumes, sound and light came together. The set in Act I looked crisp. Elomire was dressed in black pants and a white shirt, which had seemed a neutral outfit in earlier rehearsals, but in the light, which now had just the right hint of chill, it seemed austere. His chin jutted; even the words issuing from his mouth had a certain angularity. In focusing the light, Tipton had focused our attention. Though *La Bête* was not destined for critical success or long life (the show closed on Broadway after only a monthlong run), Tipton's lighting for the production was widely recognized as outstanding—enough so to earn her a Tony nomination.

"A performance," says Jennifer Tipton, "is about everything coming together. As the director Jonathan Miller has said, it's about rolling a rock up a hill and having it poised there"—in a moment of glorious balance—"before it rolls down again." For the actors, this moment marked the true beginning of the play. But for Tipton, the success of the moment meant she was almost done, almost ready to take off her smock, roll it up till it was no larger than a doorknob, pack it in her bag and move on.

During rehearsal of *A Moon for the Misbegotten*, the monitor on the worktable displays the lighting configuration for each cue. Boldface numbers are the channels, with percentage of intensity below them.

By Sue Hubbell

Maybe the 'killer' bee should be called the 'bravo' instead

It's a rough, tough character, but beekeepers are finding that it's not as bad as some sensational reports might lead us to believe

I first laid eyes on the honeybees that headline writers like to call "killer bees" the day after I arrived in Guatemala and was walking around the Maya ruins of Tikal. I was listening to a guide talk about the remains of that pre-conquest culture when I was distracted by a sound familiar to any beekeeper: the industrious hum of bees at work. I dropped to my knees to watch them gathering golden pollen from the small yellow flowers all around our feet. They looked just like the bees in my hives back home in Missouri—perhaps a bit smaller, but it was hard to judge. One of the other Americans in the group asked me what I was doing. "These are killer bees," I told her. "They have replaced other honeybees in Guatemala, and I want a closer look."

The Americans reacted with alarm, evidently expecting the bees to rise up in wrath from their flowers and sting them to death. They didn't. Any bee, even a killer bee, will not sting while happily collecting pollen or nectar unless she (in honeybee societies the females do the work) is stepped upon or otherwise attacked. She can sting only once and dies afterward, so she will reserve that "suicidal" gesture for the defense of her home—her hive, its honey and her sister bees. Later, over dinner, several of my companions asked me about the bees. I had not yet worked with the bees in their hives, as I was to do in the following weeks, and so all I could tell them was what I had read in beekeeping magazines and learned from biologists in preparation for my trip.

What's in a name? Chances are that thriller movies like *The Swarm*, featuring major death by bee sting, wouldn't even have been made if it weren't for the term "killer bees." Scientists usually refer to these creatures as African bees or, after they have interbred with European races, Africanized or neotropical bees. *Abejas bravas*—"fierce bees"—is what some South American beekeepers call them. I call them "bravo bees" because of their feisty image.

The killer-bee label, it turns out, was invented not by headline writers or Hollywood scenarists but by Brazilian strongmen. According to Roger Morse, a professor at Cornell University and the grand old man of American beekeeping, the origin was purely political. Morse has worked with Warwick E. Kerr, the university professor in Brazil who first introduced these bees back in 1956 from South Africa, where they were (and are) used widely and successfully for commercial honey production. The Brazilian Ministry of Agriculture had requested Kerr's help to bolster beekeeping in the warmer parts of Brazil where other subspecies of honeybees had not thrived. Morse picks up the story in the second edition of his book *Bees and Beekeeping*, which is due to be published next year by Cornell University Press:

> On April 1, 1964, military forces took over the government in Brazil. Professor Kerr, who had introduced the African bees, was a well-known scientist in Brazil and represented his country at many international meetings; in this regard he was badly needed by the government. Kerr was also critical of the military government and there was conflict between him and the local military commander. Kerr was jailed twice by the military, the first time in 1964 when he protested that a group of local railway workers were being maltreated, and a second time in 1969 for protesting the torture of a Catholic nun. In an effort to discredit Kerr as a scientist, the military played upon the fear that many people have of stinging insects. Since most people do not know the difference between bees and wasps, any stinging incident, many of which were caused by wasps, was blamed on Professor Kerr.
>
> The Brazilian military called the bees, in Portuguese, the language of Brazil, *abelhas assassinas* (killer bees). So far as I can determine, the first mention of the words "killer bees" in the United States was in *Time* magazine in the Septem-

Africanized bees work a field of flowers near ruins in Guatemala. Presently these insects are invading Texas.

Illustrations by Paul M. Breeden

In Missouri, a horse that was tethered too close to the hives of some ordinary European honeybees was stung to death.

ber 24, 1965, issue that picked up one of these military press releases. Much the same story was repeated in a second article in the same magazine in the April 12, 1968, issue. Those stories prompted others to write in this same vein, and the term and the Brazilian association with "killer bees" was firmly established.

There are several species of the bugs we call honeybees: *Apis mellifera*, *A. dorsata*, *A. florea* and *A. cerana*. The last three are not in the Western Hemisphere, but not even *A. mellifera* was in the Americas until the Colonists brought it when they settled here. The bee they introduced, a subspecies, *A. mellifera mellifera*, is dark and extremely ill-tempered: the German bee, by common name. For 200 years it stung people but provided honey for those who were willing to destroy its hives to get some.

In the late 1800s, with the invention of better beekeeping equipment, people began to import other subspecies from around the world in the interests of getting a more productive, gentler bee. (Several articles in 19th-century beekeeping journals suggest that one of those subspecies may have been *A. m. scutellata*, the same bee that Kerr later imported from Africa. Thus its genes may already be present in our American honeybees.) The most successful of the imports were various central and southern European subspecies, particularly the Italian, *A. m. ligustica*, a bee with a happy, Mediterranean disposition. It is the queen bee that generally determines the disposition of a hive, and queen-bee breeders have used the Italian, along with other European races, to develop hybrids so gentle that, by now, beekeeping has become a popular backyard hobby (SMITHSONIAN, July 1987).

Lurking in tree cavities and other wild places, however, descendants of the German bees have lived on and continue to interbreed with hive bees. Sometimes they are captured and kept by bee hunters in my Ozark home country, where they are known as Mean Little Suckers, or something very like it. Even when Mean Little Sucker queens cross with gentle Italian drones, the offspring can be hot-tempered and quick to sting. Like other commercial beekeepers, I've learned to work with bees that have a hair-trigger temper. I wear protective clothing, a veil and gloves; I pour soothing smoke from a bee smoker on them when I open their hives; and I treat them gently and politely, especially in inclement weather, when they are quicker to take offense than on warm, sunny days.

About 40 people die each year in the United States from the stings of venomous insects. Of these deaths, ordinary European honeybees are responsible for about half. They can also kill animals. I remember when a horse, tethered too near to some hives, was stung to death in my own Missouri town. Also in Missouri, in 1981, a woman who was reported as already having health problems was stung to death by bees. They were identified

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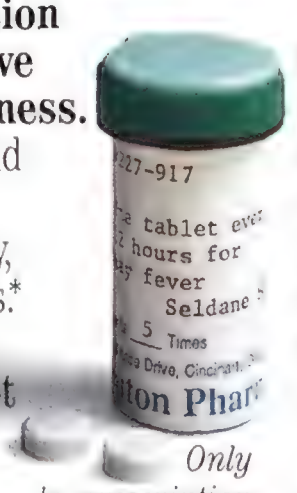

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*Definition of "risk of drowsiness" is incidence greater than placebo (a sugar pill).
†The reported incidence of drowsiness with Seldane (5.8%) in clinical studies involving more than 11,000 patients did not differ significantly from that reported in patients receiving placebo (6.9%).
‡Based upon worldwide prescription and distribution information (1986-1990)–data on file, Marion Merrell Dow Inc.
SEE BRIEF SUMMARY OF PRESCRIBING INFORMATION ON NEXT PAGE.

SELAE 301/A1895 ©1991, Marion Merrell Dow Inc. March, 1991 MDZ-101 6131B1

Seldane®

(terfenadine) 60 mg Tablets

BRIEF SUMMARY

CAUTION: Federal law prohibits dispensing without prescription

DESCRIPTION

Seldane (terfenadine) is available as tablets for oral administration. Each tablet contains 60 mg terfenadine. Tablets also contain, as inactive ingredients: corn starch, gelatin, lactose, magnesium stearate, and sodium bicarbonate.

INDICATIONS AND USAGE

Seldane is indicated for the relief of symptoms associated with seasonal allergic rhinitis such as sneezing, rhinorrhea, pruritus, and lacrimation.

CONTRAINDICATIONS

Seldane is contraindicated in patients with a known hypersensitivity to terfenadine or any of its ingredients.

PRECAUTIONS

General: Terfenadine undergoes extensive metabolism in the liver. Patients with impaired hepatic function (alcoholic cirrhosis, hepatitis), or on ketoconazole or troleandomycin therapy, or having conditions leading to QT prolongation (e.g. hypokalemia, congenital QT syndrome) may experience QT prolongation and/or ventricular tachycardia at the recommended dose. The effect of terfenadine in patients who are receiving agents which alter the QT interval is not known. These events have also occurred in patients on macrolide antibiotics, including erythromycin, but causality is unclear. The events may be related to altered metabolism of the drug, to electrolyte imbalance, or both.

Information for patients: Patients taking Seldane should receive the following information and instructions. Antihistamines are prescribed to reduce allergic symptoms. Patients should be questioned about pregnancy or lactation before starting Seldane therapy, since the drug should be used in pregnancy or lactation only if the potential benefit justifies the potential risk to fetus or baby. Patients should be instructed to take Seldane only as needed and not to exceed the prescribed dose. Patients should also be instructed to store this medication in a tightly closed container in a cool, dry place, away from heat or direct sunlight, and away from children.

Drug Interactions: Preliminary evidence exists that concurrent ketoconazole or macrolide administration significantly alters the metabolism of terfenadine. Concurrent use of Seldane with ketoconazole or troleandomycin is not recommended. Concurrent use of other macrolides should be approached with caution.

Carcinogenesis, mutagenesis, impairment of fertility: Oral doses of terfenadine, corresponding to 63 times the recommended human daily dose, in mice for 18 months or in rats for 24 months, revealed no evidence of tumorigenicity. Microbial and micronucleus test assays with terfenadine have revealed no evidence of mutagenesis.

Reproduction and fertility studies in rats showed no effects on male or female fertility at oral doses of up to 21 times the human daily dose. At 63 times the human daily dose there was a small but significant reduction in implants and at 125 times the human daily dose reduced implants and increased postimplantation losses were observed, which were judged to be secondary to maternal toxicity.

Pregnancy Category C: There was no evidence of animal teratogenicity. Reproduction studies have been performed in rats at doses 63 times and 125 times the human daily dose and have revealed decreased pup weight gain and survival when terfenadine was administered throughout pregnancy and lactation. There are no adequate and well-controlled studies in pregnant women. Seldane should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nonteratogenic effects: Seldane is not recommended for nursing women. The drug has caused decreased pup weight gain and survival in rats given doses 63 times and 125 times the human daily dose throughout pregnancy and lactation. Effects on pups exposed to Seldane only during lactation are not known, and there are no adequate and well-controlled studies in women during lactation.

Pediatric use: Safety and effectiveness of Seldane in children below the age of 12 years have not been established.

ADVERSE REACTIONS

Experience from clinical studies, including both controlled and uncontrolled studies involving more than 2,400 patients who received Seldane, provides information on adverse experience incidence for periods of a few days up to six months. The usual dose in these studies was 60 mg twice daily, but in a small number of patients, the dose was as low as 20 mg twice a day, or as high as 600 mg daily.

In controlled clinical studies using the recommended dose of 60 mg b.i.d., the incidence of reported adverse effects in patients receiving Seldane was similar to that reported in patients receiving placebo (See Table below).

ADVERSE EVENTS REPORTED IN CLINICAL TRIALS

Adverse Event	Percent of Patients Reporting				
	Controlled Studies*			All Clinical Studies**	
	Seldane N=781	Placebo N=665	Control N=626***	Seldane N=2462	Placebo N=1478
Central Nervous System					
Drowsiness	9.0	8.1	18.1	8.5	8.2
Headache	6.3	7.4	3.8	15.8	11.2
Fatigue	2.9	0.9	5.8	4.5	3.0
Dizziness	1.4	1.1	1.0	1.5	1.2
Nervousness	0.9	0.2	0.6	1.7	1.0
Weakness	0.9	0.6	0.2	0.6	0.5
Appetite increase	0.6	0.0	0.0	0.5	0.0
Gastrointestinal System					
Gastrointestinal Distress (Abdominal distress Nausea, Vomiting Change in Bowel habits)	4.6	3.0	2.7	7.6	5.4
Eye, Ear, Nose, and Throat					
Dry Mouth/Nose/Throat	2.3	1.8	3.5	4.8	3.1
Cough	0.9	0.2	0.5	2.5	1.7
Sore Throat	0.5	0.3	0.5	3.2	1.6
Epistaxis	0.0	0.8	0.2	0.7	0.4
Skin					
Eruption (including rash and urticaria) or itching	1.0	1.7	1.4	1.6	2.0

*Duration of treatment in "CONTROLLED STUDIES" was usually 7-14 DAYS.
**Duration of treatment in "ALL CLINICAL STUDIES" was up to 6 months.
***CONTROL DRUGS: Chlorpheniramine (291 patients), d-Chlorpheniramine (189 patients), Clemastine (146 patients).

Rare reports of severe cardiovascular adverse effects have been received which include arrhythmias (ventricular tachyarrhythmia, torsades de pointes, ventricular fibrillation), hypotension, palpitations, and syncope. In controlled clinical trials in otherwise normal patients with rhinitis, at doses of 60 mg b.i.d. small increases in QTc interval were observed. Changes of this magnitude in a normal population are of doubtful clinical significance. However, in another study (N=20 patients) at 300 mg b.i.d. a mean increase in QTc of 10% (range −4% to +30%) (mean increase of 46 msec) was observed without clinical signs or symptoms.

In addition to the more frequent side effects reported in clinical trials (See Table), adverse effects have been reported at a lower incidence in clinical trials and/or spontaneously during marketing of Seldane that warrant listing as possibly associated with drug administration. These include: alopecia (hair loss or thinning), anaphylaxis, angioedema, bronchospasm, confusion, depression, galactorrhea, insomnia, menstrual disorders (including dysmenorrhea), musculoskeletal symptoms, nightmares, paresthesia, photosensitivity, seizures, sinus tachycardia, sweating, tremor, urinary frequency, and visual disturbance.

In clinical trials, several instances of mild, or in one case, moderate transaminase elevations were seen in patients receiving Seldane. Mild elevations were also seen in placebo treated patients. Marketing experiences include isolated reports of jaundice, cholestatic hepatitis, and hepatitis. In most cases available information is incomplete.

OVERDOSAGE

Information concerning possible overdosage and its treatment appears in Full Prescribing Information.

DOSAGE AND ADMINISTRATION

One tablet (60 mg) twice daily for adults and children 12 years and older.

Product Information as of July, 1990

MARION MERRELL DOW INC.

Prescription Products Division

Kansas City, MO 64114

SELAE 301/A1895

6131B1

as German bees that had been disturbed by some farm machinery. It was a death every bit as horrible as those in any of the stories I have read about killer bees.

When I first began reading about bravo bees, their reported behavior reminded me very much of German bees. I asked all the scientists I talked to if they had compared the two subspecies. None had. None had ever worked with German bees at all. Bret Adee, co-owner with his father, Richard, of the largest commercial honey-producing operation in the United States, Adee Honey Farms in South Dakota, mentioned this lack when I talked to him by telephone. He had just returned from a trip to Mexico and Belize to study bravo bees first-hand. He thought their "aggressiveness" had been oversold by scientists who compared them with bees that had been gentled by the South American climate. He reported that many younger Central American beekeepers he talked to actually preferred bravo bees, finding them more productive and disease-free than the ones they had used before. "The scientists," complained Adee, "are interested in research, not practical beekeeping."

In fairness, the spread of these bees is, biologically speaking, a very interesting event: the rapid genetic takeover and replacement of one subspecies by another. Much of the scientific work that has been done relates to identification of the bees. Since they look so much alike, how do you know when you have a bravo bee? Researchers have catalogued certain physical differences, but these don't always correlate with aggressive or placid behavior, according to Marla Spivak, a researcher at the University of Arizona and coeditor of a new book, *The "African" Honey Bee* (Westview Press, 1991). Beekeepers in the field have resorted to a more practical test, based on bee behavior. In Latin America the rule of thumb is: if they sting a lot, they are *las Africanas.*

Once Warwick Kerr's bees had escaped the confines of his research apiary, they spread rapidly and soon began to outnumber the European stocks already present. Space does not allow a full explanation here but, in brief, virgin queen bees and males, or drones, mate high in the air. Each queen, who will head up a new colony, may mate with 8 to 17 drones. Although the first-generation cross of European queens and African drones may represent a genetic heritage that is 50-50, in subsequent generations the African genes tend increasingly to dominate. Thus, as they migrated northward, the bravo bees genetically took over local bees.

But bravo bees also have a few other characteristics that give them a competitive edge. The queens lay more eggs that develop into adult bees a little sooner than European bees do. The adults also go to work a bit earlier. A Guatemalan beekeeper told me that *las Africanas* are out on the flowers before dawn, 20 minutes to an hour earlier than the Europeans. They seem to be remarkably disease resistant and, possibly, mite resistant (disease and mites are a terrible bother to North America's refined, overbred bees). Our docile hive bees, bred for temperate regions, have adapted to working furiously during the months of flowers, gathering nectar that they turn into honey—some of which the beekeeper takes. They feed upon what's left during the winter, and will meekly starve to death after their stores are gone unless the beekeeper feeds them some sugar syrup.

Not so the bravo bees. Having evolved in tropical Africa, they have made their way differently. When blossoms cease blooming in one area, they move on to another, flying many miles to find new nectar sources, leaving their old hives behind. Beekeepers call this "absconding," and in Latin America they have had to learn to feed sugar syrup as soon as blossoms

Beekeeper Sue Hubbell has 300 hives in Missouri. She is the author of Book of Bees *(Random House, 1988).*

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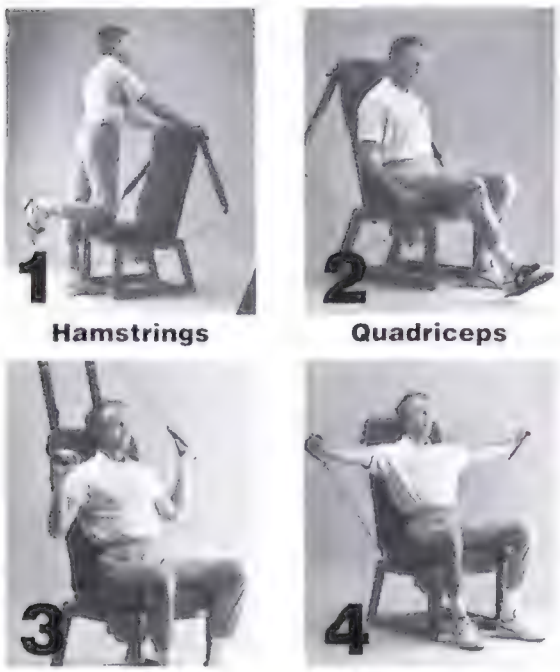

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When they are working hives of Africanized bees, apiarists in Central and South America use jumbo-sized smokers to calm them.

disappear in their area in order to keep their bees. But the keepers have also discovered that as soon as flowers begin to bloom again, they often need only set out an empty hive, and a swarm may come to live in it. Getting new bees is relatively easy. The bravo bees build up in numbers, generally prosper and therefore swarm more frequently than do European bees, which has accounted for their traveling an average of 200 miles a year.

Beekeepers south of our border have had to change their methods in other ways, too. Accustomed to hot, dry weather, their former bees had been of such mild disposition they could be placed near houses, and keepers could work with them without protective clothing or the smoke that North Americans use to quiet bees before they open hives. They often used to keep their bees in rows on common stands; the easygoing insects did not become aggravated if their hive was jiggled by someone working another on the same stand. Bravo bees are more apt to become aggravated, and rapidly recruit their sisters to investigate and defend against this

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perceived threat. They must be kept on individual stands well away from animals and houses. Their keepers have learned to wear protective clothing and carry jumbo-sized bee smokers.

In the years I have been reading beekeeping magazines, I have followed the spread of bravo bees northward and noticed a pattern. The first bees to cross a country's boundary caused few problems, for they were few in number. It wasn't long, however, before Africanized colonies increased. Honey production in that country would fall as beekeepers who were unwilling or unable to change went out of business. The price of honey would rise and new beekeepers, unacquainted with any other bees, would learn how to handle the bravo bees and do better than their predecessors. Brazil, for instance, ranked 47th in world honey production before Kerr brought over the African bees. A generation has passed, the new beekeeping methods have been learned and today Brazil ranks 7th.

Back in 1986, as bravo bees were coming northward, the U.S. Department of Agriculture (USDA) proposed a plan called the Bee Regulated Zone. It was a sort of Maginot Line that was supposed to stop the invaders. This caused some merriment in the beekeeping community: anyone who has worked with bees has had to learn that they cannot be forced to do anything or prevented from doing anything. Later the program was scaled back in an attempt to slow, rather than stop, the bees' spread with traps and re-queening strategies.

The bees progressed northward. Last year, in October, the first swarm crossed the Rio Grande into Texas. The USDA, always quick with the Flit gun, killed them.

Knowing that there would be more, I decided to travel to Guatemala, where apiarists were still working out the problems with bravo bees that had arrived in that country in the mid-'80s. In Guatemala City, Eduardo Diaz, manager of El Panal, one of the big-

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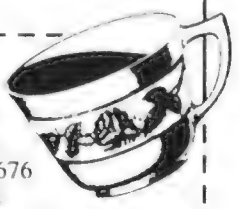

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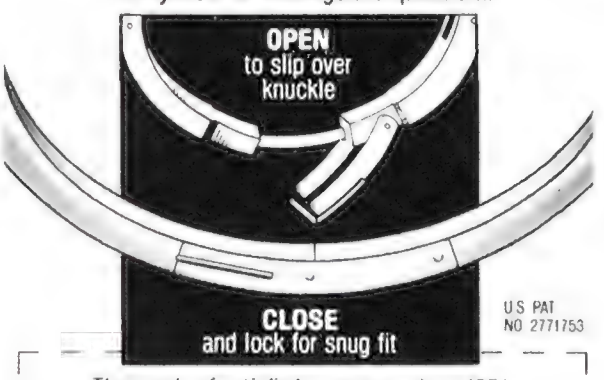

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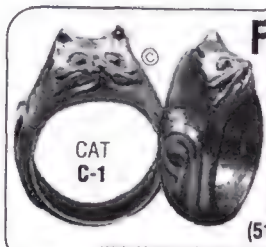

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gest commercial honey businesses in the country, said flatly to me: "These bees are not killers." He admitted that the company had seen a decline in honey production but was in the process of helping beekeepers change their methods. It had also started up a separate division to breed gentle queen bees that could be used to requeen, and thus quiet, hives that were too difficult to handle.

My driver and interpreter in Guatemala was Jorge Ibarra, a veteran beekeeper who had kept 2,000 hives in Costa Rica. Some of the beekeepers we talked to knew of incidents in which the bees had killed farm animals, mostly small ones like ducks and chickens. In a village near the Mexican border, in the department, or province, of San Marcos, we visited with 30 members of a beekeeping cooperative called Cooperativa de Producción Apis Mellifera (COOPRAM). One man told me about a baby girl who had been killed by bees. The baby had been with her older brother and sister, who were throwing stones at the hive. The bees, disturbed, flew out and stung the children. The two older ones were able to run away. The baby was not.

Whack! Whack! Whack! One of the beekeepers who had come along with Ibarra and me (presumably to protect the *gringa*) was thumping a hive in the Mundo Nuevo apiary near Malacatán, also in San Marcos. The bees in this yard, I had been assured, were highly Africanized and sometimes almost impossible to handle, but they were calmly flying in and out of their hives when we walked up to them, and seemed to have no interest in us. "*Muy brava*," the beekeeper exclaimed as, after some more thumping and a shake of the hive, the bees flew out to investigate. I was shocked, for I would never dare disturb my own Missouri hives that severely.

I began to open hives, pulling out frames of honeycomb and young bees. Jorge Mansilla, manager of Mundo Nuevo, was using a jumbo bee smoker,

puffing smoke into the hives for me as I worked along the row. I was wrapped up in the same protective gear I wear in Missouri. Most of the co-op beekeepers were comparably dressed, although here and there a bee suit or veil showed holes and tears. But Mansilla had on only a veil. His hands, pumping the smoker directly in front of the hive entrances, were bare. His shirt was rolled up past his elbows, leaving his arms unprotected. As we worked on down the row of hives, more and more bees flew up into the air, as bees from each successive hive egged one another on into a display of defensive behavior. *Plok! Plok!* They began to throw themselves against our veils, just as angry German bees do. We closed the last hive and walked away. No one was stung, including the lightly clad Mansilla.

We visited another beeyard where highly Africanized bees had been moved in for the teaching of students at a nearby trade school. The bees in those hives, Ibarra told me, had been extremely ill-tempered in the lowlands, but here, at an altitude of 2,000 meters (6,560 feet), they were no touchier than the bees I routinely handle at home. This was true even though, just hours before, all the hives had been moved about 50 feet to get them away from some nearby houses, a major disturbance that normally I would expect to aggravate bees beyond telling. They may have been having a particularly good day, for bravo bees are reported to be quirky and unpredictable, but they may also have been showing the benign effects of the cooler, drier climate at that altitude.

The altitude was lower and the climate warmer near the COOPRAM apiary I had visited earlier. That area had already been taken over by bravo bees when Ibarra and Rick Hellmich, a scientist from the USDA's honeybee research lab in Baton Rouge, began a project to teach the co-op's 30 beekeepers better methods. Funded by the USDA and the Agency for International Development, the project made use of research that Hellmich had begun in Venezuela, which until recently has had a particularly rough time of it with bravo bees. Ibarra and Hellmich showed the beekeepers how to raise gentler queen bees and how to introduce them into their hives to alter the genetic makeup of the colony. I walked into one of their yards without a veil, protective clothing or smoke, and opened hives there. The bees flew busily past us to the flowers they were working, taking no notice of us at all. "I prefer these bees," one of the co-op members told me, "because with the techniques we have learned we have become better beekeepers." The group's 2,000 hives are now averaging an annual honey yield of 135 pounds each—more than ever. Just a few days before we made our visit, COOPRAM received its first order for queen bees from a Mexican apiary. The mem-

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bers believe that within a year they will be self-sufficient.

At the end of my visit I talked with Magali Stitlemann and Steve Todhunter, two young expatriates—she Swiss, he American—who are heading up the queen-breeding division of the El Panal honey company, near Lake Atitlán, in central Guatemala. They told me that by producing enough gentle queen bees they hope to be able to furnish El Panal, and perhaps other honey producers, with queen bees that have the virtues of several races. Said Todhunter: "What we hope for is to develop, through crosses, a new kind of bee—a Guatemalan bee—that will be dependable, gentle and productive, one that may be used other places where Africanized bees become a problem."

How far north are bravo bees likely to be a "problem"? American queen-breeders who have their apiaries in the southern part of the United States, where the Africanized bees will come first, wish they knew the answer. The experts don't even agree on whether there will or will not be a problem. Orley Taylor, professor at the University of Kansas, who has studied bravo bees for years, emphasized in conversations with me their aggressiveness, the stinging incidents and the bees' unpredictability. Marla Spivak, a one-time Taylor student who has studied Africanized bees throughout Latin America, says: "I guess I have an unusual point of view, but I think that the arrival of the Africanized honeybee may *eventually* be one of the best things that has ever happened to American beekeeping." Why is that? Mainly because of disease resistance and the general improvement of our bee stocks. Another researcher, David J. C. Fletcher, is coeditor of *The "African" Honey Bee* and a professor at Bucknell University. He has worked with *A. m. scutellata* in South Africa and believes that there may be some problems, but that the way to solve them is to import gentler bees from Africa and use them to develop new strains. Taylor says there are *no* gentle bees in South Africa.

The truth is, no one can predict how far the bravo bees will come into the United States or how they will behave when they get here. But life itself is unpredictable, and there is real danger in the world.

When I left my other home, in Washington, D.C., to go to Guatemala, war had just started in the Persian Gulf. The house that my husband and I share is one street away from the house of the Israeli Ambassador to the United States. As a precaution against terrorist attacks, guards armed with rifles protected his house and the Secret Service patrolled our street. On the flight to Guatemala City, security was tight. In Guatemala, Ibarra and I could not drive at night because of bandits. We took detours to avoid bridges blown up during the civil unrest. In the mountains, Ibarra pointed out to me the debris from a volcano that had erupted two months previously, killing several people. On the penultimate night of my stay, I was awakened by a small earthquake. While visiting the queen-breeders near Santiago Atitlán, where the army had killed 14 unarmed Indian villagers some months earlier, I heard bursts of gunfire in the hills.

As dangers go, I'll take "killer bees" any day.

Compared with other dangers in this hemisphere—including bandits, volcanoes and earthquakes—feisty bees seem relatively harmless.

Book reviews

Museum of American Folk Art Encyclopedia of Twentieth-Century American Folk Art and Artists
Chuck and Jan Rosenak
Abbeville Press, $75

Don't be put off by the mouthful of a title: yes, this is a reference book, and an illustrated survey of the lives and careers of 257 American folk artists. But it is also a kind of carnival grab bag, bursting with reproductions of strange and endearing paintings, insane mixed-media constructions, masterly wood carvings, sculptures and collages. Above all, this mammoth encyclopedia is one of the most unputdownable browsing books of recent memory.

This is because Chuck and Jan Rosenak—exemplary collectors of modern folk art—have enriched each artist's entry with homey, unexpected biographical revelations, transforming a scholarly resource into a scrapbook of American eccentrics, visionaries, rebels and geniuses. We are talking strange here, folks. The line between madness and artistic mastery has seldom seemed so thin.

"About 1972 an angel visited Zebedee Armstrong and proclaimed, 'You have to stop wasting your time because the end of the world is coming.' " Since then Armstrong has spent his remaining time fabricating some 600 decorated calendars "intended to predict the actual date" of the Apocalypse. Painter Howard Finster, with more than 14,000 works to his credit, practices "sermon art," which means the production of harrowing tableaus such as *Sea Became as Blood*; its fire and brimstone is enough to send any sinner to his knees. Another preacher, Edgar Tolson, actually blew up his own church because his parishioners were

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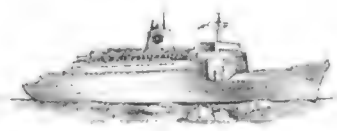

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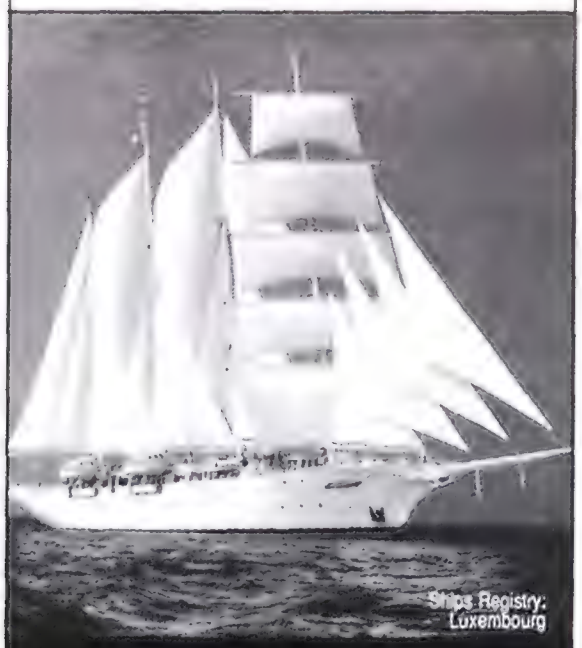

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"hypocrites." He is the preeminent Kentucky wood-carver of the century.

Nearly every page of this encyclopedia provides similarly entertaining tidbits from the lives of these untrained artist-dreamers. Walter Flax lived like a hermit in the Virginia woods and constructed, out of tin roofing and found materials, a complete navy of battleships, submarines and supporting craft (below) he "sailed" around his shack.

Not only are the backgrounds of folk artists sometimes unusual, but so are their materials and techniques. Tressa Prisbrey works in bottles; Edward Leedskalnin in coral. Simon Rodia constructed his 99-foot-high *Watts Towers*, the most famous folk art environment in the nation, largely of discards—some brought to him by neighborhood children—and without "a single bolt, weld or rivet." A younger artist, Stephen Warde Anderson, who specializes in portraits of imaginary women, "cuts strips from plastic food containers and uses these strips . . . and nails to apply paint. He paints with liquid tempera that is first allowed to harden in bottle caps. 'I have found,' he says, 'that my saliva mixed with hardened paint makes a paste that is just right.'" The portraits are made, Seurat-like, of tiny dots of color.

It is hard to stop flipping about in this encyclopedia, marveling at the hard lives and deep spiritual necessity that have led to such startling and beautiful works. Some of these artists are longtime propagandists for political, racial or religious causes; even more of them found their esthetic avocations late in life, after retirement, or as a way to ease a lonely widowhood. When their better-off neighbors had retreated to Floridian senescence, these working-class visionaries were just starting to realize their dreams in paint, stone and wood. Often their quiet genius has come to light only after

Small ship, 34 inches long, is one of the few remaining of Walter Flax's navy.

death, when the marvels in their basements or garages have been discovered by relatives.

For these are marvelous works, even the kitschiest. Looking at the illustrations in the Rosenaks' encyclopedia should send a lot of enthusiasts to their nearest museum, and to traveling exhibitions like "The Cutting Edge: Contemporary American Folk Art" (the book was designed as a companion volume to this show, which tours six U.S. cities through May 1992). This compendium should also inspire excursions to truck stops and country stores where unregarded masterworks may perhaps still be found.

Michael Dirda is a writer and editor for *Washington Post Book World.*

Bedouin Poetry from Sinai and the Negev
Clinton Bailey
Clarendon Press, Oxford University, $125

A noble civilization is dying in the Sinai and Negev deserts. It is a slow disappearance, barely perceptible, like the shift of pastel light against the desert stones at dusk.

The bedouin are coming in from their seminomadic encampments in the hard wilderness. Pushed by the Israeli and Egyptian governments, and drawn by the temptations of modernity and salaried work, they are abandoning their herds of goats and camels, and congregating in permanent settlements. There, they are losing the intricate traditions of desert life, with its rich lore and complex customs of hospitality, loyalty and revenge.

Since most bedouin have been illiterate until recently, they leave behind little record of their culture except their memories, many of which are contained in oral poems composed and recited and repeated around evening fires. When these verses, which are like spoken ballads, are finally forgotten as the generations pass, so an important part of human history will have been forgotten as well. Or would have been forgotten, had my friend Clinton Bailey not come along to tape record, transcribe, translate, annotate, footnote and publish 113 poems in this remarkable volume.

I happily identify Clinton as a friend, to erase any pretense of objectivity here. Having caught a glimpse of this work in progress as we traveled in the Negev and Sinai together a decade ago, and having been guided by Clinton into a

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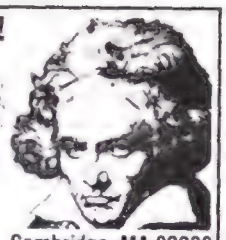

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fascination with bedouin life, I cannot ethically review his book. But I can tell a little about him and the significance of what he has done.

One achievement is to point to the consistency between traditional bedouin culture today and that of biblical times, a continuity that can sometimes be heard in the cadence and the elemental morality of the poetry. This connection with the ancient past has been a strong source of Clinton's attraction to the bedouin. "An unlettered nomadic culture tenacious enough to survive so intact for millennia is a rare phenomenon in the annals of human experience," he writes. "A detailed study of contemporary bedouin life, therefore, sheds new light on ancient cultures that interest Western civilization, most notably that of the nomadic Israelites."

Clinton is fluent in biblical references—not for religious purposes, but for historical and anthropological insights—and he peppers his conversation with them as he drives his beat-up green Land Rover up gravel-strewn desert wadis. He is tall and clean-cut and looks quite out of place in this setting. But he has acquired the bedouin's calm and comfortable patience with the timelessness of the desert, and he seems as much at home in a moonlit oasis as he does in his Jerusalem living room.

He grew up in Buffalo, New York, and moved to Israel in 1958. He earned a PhD in political science, studied Arabic and began exploring bedouin life after Israel captured the Sinai from Egypt in the 1967 war. He was troubled by Israeli efforts to move Negev bedouin off their traditional grazing grounds, efforts that often involved confiscating herds of goats and forcibly relocating families. And he remains an active defender of bedouin rights, helping them get lawyers and thread their way through the alien system of Israeli courts and government agencies.

But this is something of a lost cause, and his more durable contribution has been in collecting their poetry. He began in 1968, while doing a census for the Israeli Army in southwest Sinai, where he heard 20 poems recited by a young chief. "It was on this occasion that I discovered the bedouin love of poetry," he writes, "and witnessed a scene, often to be repeated, of men, women, and children spontaneously gathering around the reciter in a semicircle on the ground, row upon row,

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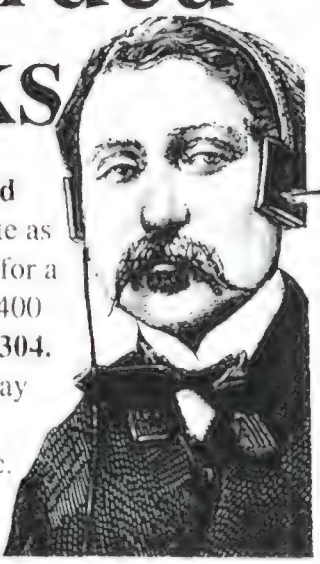

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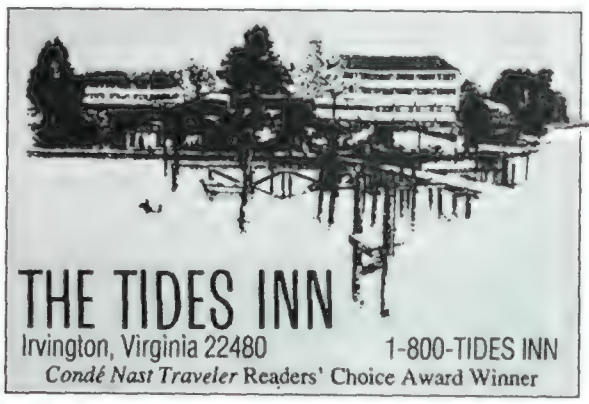

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listening intensely, repeating after him the monorhymes with which he unexpectedly ended the successive lines, and laughing at ironical, poetic depictions from the otherwise humdrum events of desert life. . . . To find an illiterate people so enchanted by poetry moved me to undertake the present study."

For 20 years or so, Clinton has journeyed to remote desert camps and recorded poems, then played them for bedouin in neighboring tribes, who often had not heard the verses of those just a few miles away. Thus, he and his tape recorder served as a kind of modern minstrel, sowing the seeds of cross-tribal fertilization.

He learned the Arabic dialect of the bedouin, and he spent long periods doing painstaking translations. The poems included advice to children, messages to lovers and enemies, self-deprecating tales, accounts of battles, comments on historical events. He would return again and again to the encampments, checking with the poets on the meaning of a word or a phrase, taking notes on the stories and customs that lay behind the verses.

These details now find their way into scores of footnotes that, in a sense, are the most interesting feature of the book, since they illuminate the richness of this civilization. One learns, for example, that "it is customary for a host to smear the blood of an animal he has slaughtered for a meal on the hinds of his guest's mount. This is a way of advertising the host's hospitality. . . ." Or, "Men in bedouin society are advised to be secretive about their plans and movements, especially not to divulge them to their wives." Or, "It is part of the bedouin chivalric code to be light-hearted (lit. 'green-hearted'); that is being unconcerned about mundane matters and desirous for adventure and danger. . . ."

Clinton Bailey's next project is to explore the bedouin system of justice, which is also described in poems that the older men remember. But they are dying, and Clinton must hurry through the twilight.

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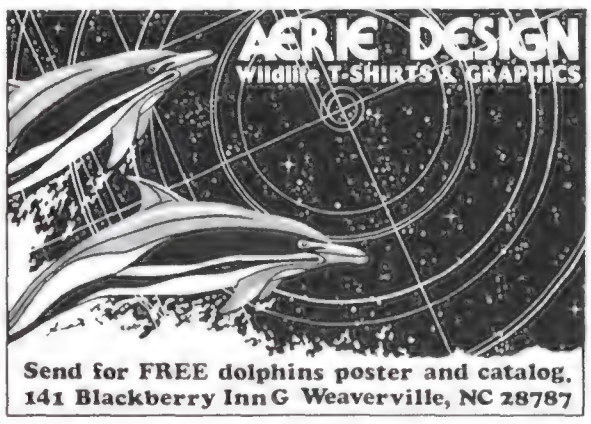
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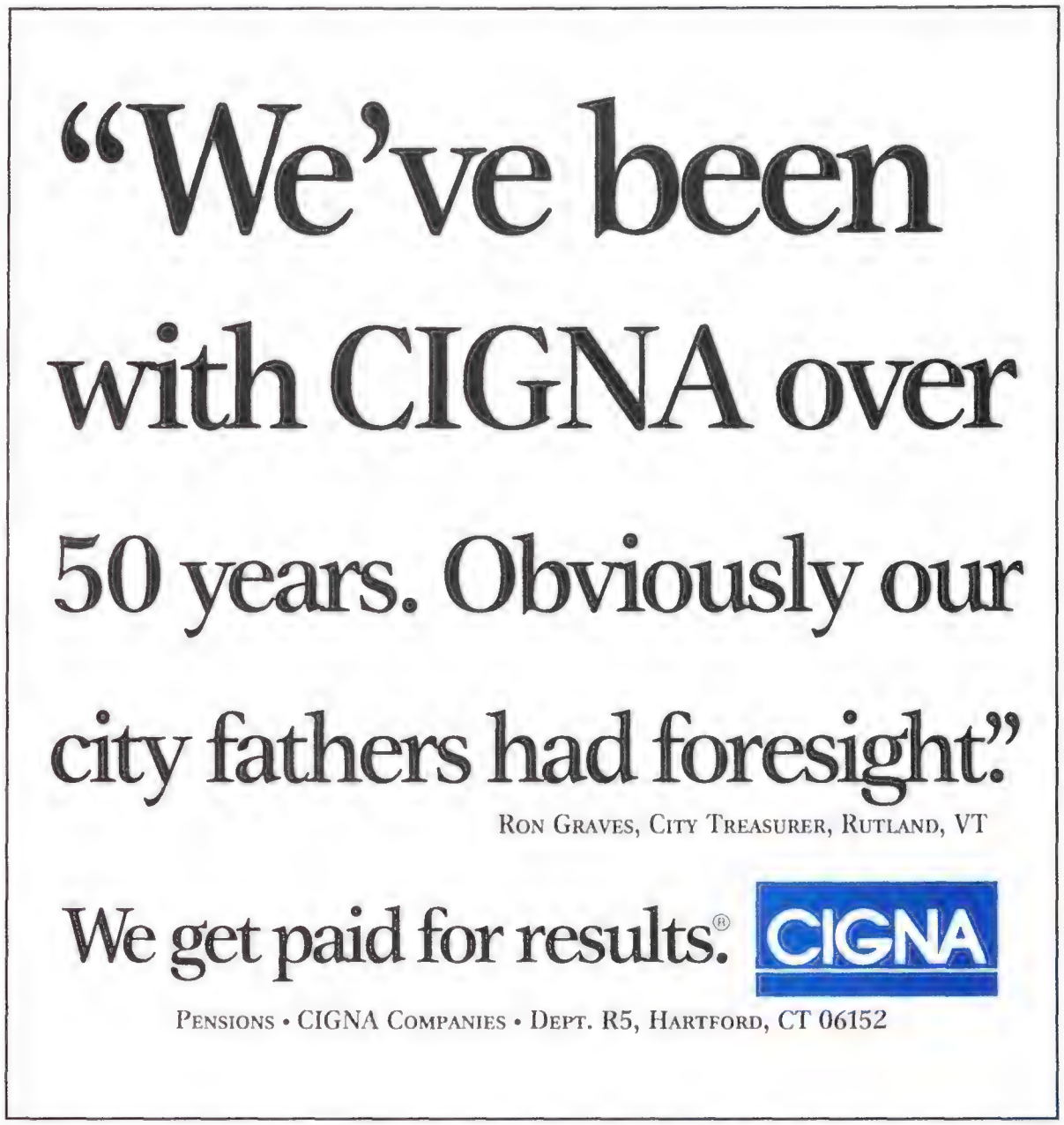
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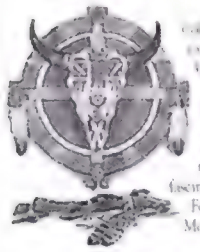

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to watch the start of the New York-to-Paris race, a 20,000-mile dash around the world. Six intrepid teams—three representing France, one each for Germany, Italy and the United States—set off from Times Square that day, their cars weighted down with ropes, lanterns, shovels, spare tires and even bear oil for protection against frigid Arctic winds. Inspired by the popular Jules Verne novel *Around the World in Eighty Days*, the race was to be, in the words of a *New York Times* reporter, "the longest and most perilous trip ever undertaken by man."

It was also, as Dermot Cole reports in his book *Hard Driving*, the greatest stunt in the brief history of the automobile. Cosponsored by *Le Matin* of Paris and the *New York Times*, the event was designed not only to increase the public's awareness of the automobile, but also to generate lively headlines. It succeeded gloriously in both aims.

The proposed route led west from New York, across the Great Plains and north to Alaska, then west to Siberia and Europe. The tricky part would be crossing the Bering Strait. The drivers planned to sail across by steamer or, if the waters were frozen, to hitch their cars to dogsleds. Once across, they intended to make their way to the Trans-Siberian Railroad and follow it to Europe. The plan, to put it mildly, took a great deal on faith.

The vehicles ranged in size from a 12-horsepower, one-cylinder French Sizaire-Naudin to a three-ton De Dion, also French, which carried 154 gallons of gas and a large sail for gliding over the plains of Siberia. The American entry, a Thomas Flyer, came complete with large wire hoops and a canvas cover.

The motorists themselves formed a Who's Who of world adventurers. They included one of the race's planners, G. Bourcier de St. Chaffray, and a swashbuckling Norwegian explorer, Captain Hans Hansen, who vowed that his crew

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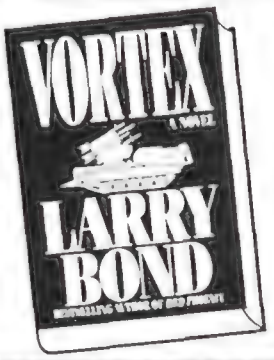

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would reach Paris or "our bodies will be found beside the car."

Hansen wasn't exaggerating. Although the racers had steeled themselves for Alaska and Siberia, they were lucky to survive Chicago. Poor roads and foul weather often caused the cars to break down or mire in mud. The spotty progress, however, did little to dampen the public's enthusiasm. The racers were hailed by large crowds and treated to elaborate banquets. "Outside of a lynching," observed the *Omaha World-Herald*, "this is the biggest spontaneous showing ever made in the city."

Today, the New York-to-Paris run is little remembered except as the inspiration for a 1965 film called *The Great Race*, starring Tony Curtis and Jack Lemmon. The movie had little in common with the reality. "None of the drivers ever found a polar bear in the back seat," the author notes, "but the true story is almost as bizarre as the fiction from Hollywood."

The little Sizaire-Naudin was defeated by snow and a broken differential within 96 miles of New York. The German Protos broke down three times in Utah and was finally shipped to Seattle by train. None of the cars could make it across Alaska; they took ship for Japan where they had to be pulled and pushed up narrow mountain trails. A carrier pigeon bearing news of the American team was killed by sea gulls. Siberian roads were so muddy the cars traveled on railroad tracks: "Listening for the toot of a locomotive became an absorbing occupation." The Americans resorted to 40 pounds of Vaseline to lubricate the Flyer's transmission.

Like the rest of the affair the finish was confused. The Germans reached Paris first, but they had been penalized 15 days for that train trip to Seattle. The Americans brought the trophy home.

Most readers will find themselves in agreement with Hans Koeppen, a member of the German team. "We have had a splendid trip," he remarked at the conclusion of the adventure, "and I'd like to take another such."

Daniel Stashower is a novelist and reviewer based in Alexandria, Virginia.

Measure of the Year
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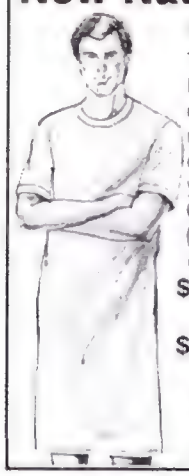

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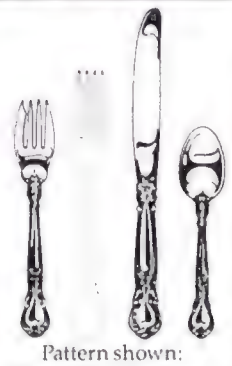

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to this illuminating book. In America there was Thoreau, of course; in Russia there was Turgenev. A less eminent but surely fitting contributor to this tradition is Roderick Haig-Brown, whose territory is the receding wilderness of Canada's Pacific coast. In today's world of thrill-a-minute best-sellers and psychotic cities, a book like Haig-Brown's *Measure of the Year* is a reassuring reminder that other kinds of writing are still to be found—and other kinds of living, too, in the rural regions of America.

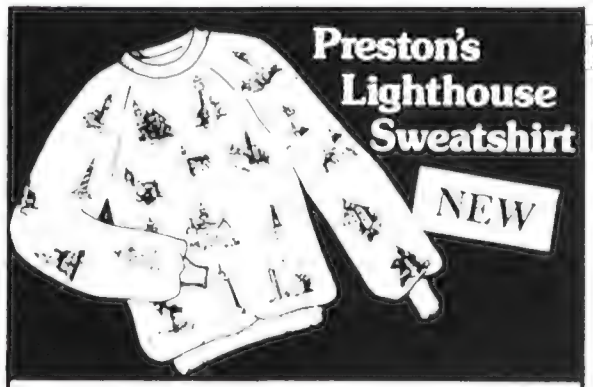
Measure of the Year is a reflective account of a "family trying to live out a sensible and positive life in the twentieth century" on the shore of Vancouver Island, north of the state of Washington. The book was published in 1950—this Lyons & Burford paperback is a reissue—but its messages are as evocative and relevant today as they were then.

Haig-Brown tells of the yearly cycle of life on the 20-acre farming homestead where he lives with his wife and four children on the edge of what he calls the Elk River. This is actually the Campbell River, near the small city of the same name. It is now a busy center, but it was a frontier bush settlement when Haig-Brown and his wife, Ann, moved there in the mid-1930s.

Measure of the Year is a month-by-month narrative, with a chapter for each, describing the joys and challenges of the changing seasons. In addition, it is a collection of contemplations on subjects as varied as milking a cow, community service, collecting books, freedom and personal liberty, fish and birds, planting a garden, administering the law, the uses of tools, and conserving the wilderness.

For Roderick Haig-Brown was a man of intense and varied interests. He was a woodsman, a magistrate (as "one of His Majesty's Stipendiary Magistrates in and for the Province of British Columbia," he heard 200 or 300 cases a year), a prolific writer and an internationally known authority on fishing.

He was also a concerned citizen and an environmentalist who was far ahead of his time. Forty years before the *Exxon Valdez* ran aground, Haig-Brown was concerned about oil-soaked birds on the shore. He campaigned against hydroelectric and industrial development of the countryside, and he deplored the logging that has since savaged the forests of British Columbia. (Novelist Margaret Atwood has described this



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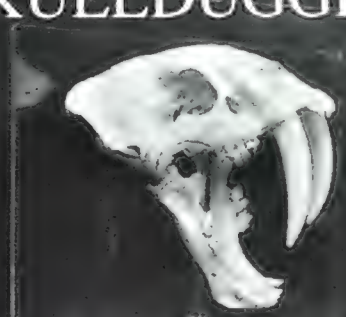

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part of Canada as "the land of stumps.")

Haig-Brown was also a prose stylist of considerable artistry. Here he is describing one of his months: "Very often mid-September is forest-fire weather and sometimes there is a hard dry wind that shrivels the leaves, dries them up and rattles their bones, then tears them away like the dead bodies of Indians from burial trees. That is a time to worry and watch the sky. . . .

"But in most years the night dews and mists are enough to soften the threat of the gleaming days. . . . And the rivers hold low and the hills are hot under the sun and the grouse spread out along them."

Passages like that can remind you of Hemingway. Haig-Brown's life, however, was a hemisphere removed from the glamour and sophistication of such fashionable writers. Raised in Dorset, England, he came to Canada as a teenager in 1929 and worked as a logger on the west coast. And there he stayed, remote from the literary world. Living in the bush, he wrote articles and stories about outdoor life that appeared in the United States and Europe for years before he was published in his own country. He died in his garden by the river in 1976, at 68, and there is now an annual author's award in his name.

George Woodcock, perhaps Canada's premier man of letters, who wrote the introduction to *Measure of the Year*, described Haig-Brown years ago as "a man made wise by the patient observation of nature and life." The wisdom comes through on every page.

David Lancashire is a correspondent for the *Globe and Mail*, Toronto.

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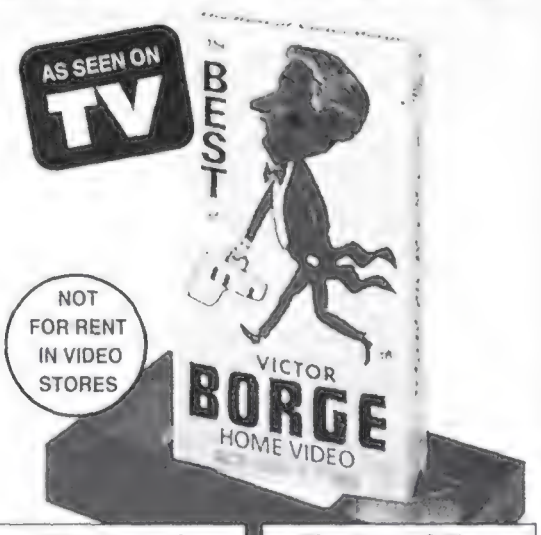

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The Ghost Dance: Ethnohistory and Revitalization by Alice Beck Kehoe, Holt, Rinehart and Winston, 1989

"The Q Street Bridge, Washington, D.C." by Glenn Brown and Bedford Brown IV, *American Architect*, October 27, 1915

Ghost Dance by David Humphreys Miller, University of Nebraska Press, 1959

Civil Rights Memorial (p. 32)

Free at Last: A History of the Civil Rights Movement and Those Who Died in the Struggle by Sara Bullard, Civil Rights Education Project (Montgomery, Alabama), 1989

A Testament of Hope: The Essential Writings of Martin Luther King jr., edited by James Melvin Washington, Harper & Row, 1986

Voices of Freedom: An Oral History of the Civil Rights Movement from the 1950s Through the 1980s, compiled by Henry Hampton and Steve Fayer with Sarah Flynn, Bantam Books, 1990

Parting the Waters: America in the King Years, 1954-63 by Taylor Branch, Simon and Schuster, 1988

William Wegman (p. 44)

William Wegman: Paintings, Drawings, Photographs, Videotapes (retrospective catalog), edited by Martin Kunz, Harry N. Abrams (New York), 1990

"Wegman Unleashed" by Brooks Adams, *ARTnews*, January 1990

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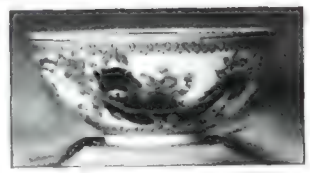

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Man's Best Friend by William Wegman and Laurance Wieder, Harry N. Abrams (New York), 1982

Rock hounds (p. 60)

The Smithsonian Treasury: Minerals and Gems by John Sampson White, Smithsonian Institution Press, 1991

A Field Guide to Rocks and Minerals by Frederick H. Pough, Peterson Field Guide Series, Houghton Mifflin, 1976

Columbus challengers (p. 76)

The Quest for America by Geoffrey Ashe, Praeger, 1971

Admiral of the Ocean Sea: A Life of Christopher Columbus by Samuel Eliot Morison, Northeastern University Press (Boston), 1983

The Mysterious History of Columbus by John Noble Wilford, Knopf, 1991

Army maneuvers, 1941 (p. 88)

The Borrowed Years, 1938-1941: America on the Way to War by Richard M. Ketchum, Random House, 1989

George C. Marshall: Ordeal and Hope, 1939-1942 by Forrest Pogue, Viking, 1966

The American Heritage Picture History of World War II, edited by David C. McCullough, American Heritage Publishing Company, 1966

Commander in Chief: Franklin Delano Roosevelt, His Lieutenants, and Their War by Eric Larrabee, Harper & Row, 1987

Jennifer Tipton (p. 104)

Light on the Subject by David Hays, Limelight Editions (New York), 1989

"Jennifer Tipton: Architect of the air" by Michael Sommers, *Theatre Crafts International*, October 1990

"Some Thoughts About Lighting Dance" by Jennifer Tipton, *Lighting Dimensions*, May-June 1978

Stage Lighting by Richard Pilbrow, Drama Book Publishers (New York), 1979

The Magic of Light by Jean Rosenthal and Lael Wertenbaker, Little, Brown, 1972

Killer bees (p. 116)

The "African" Honey Bee, edited by Marla Spivak, David J. C. Fletcher and Michael D. Breed, Westview Press (Boulder, Colorado), 1991

The Biology of the Honey Bee by Mark L. Winston, Harvard University Press, 1987

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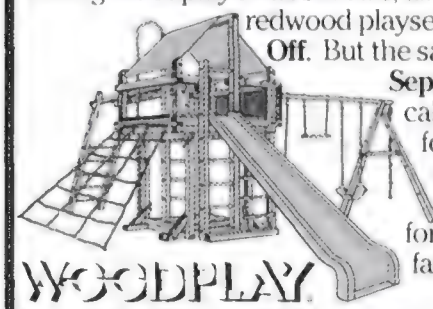

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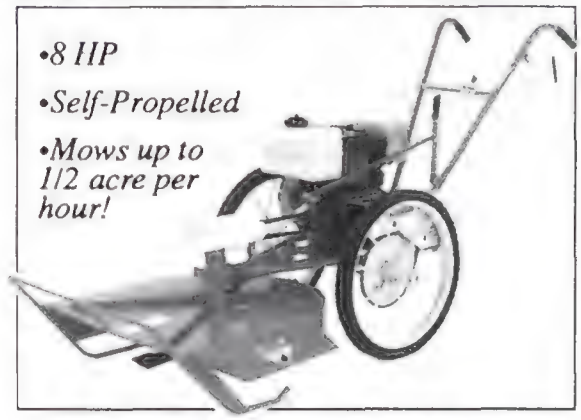

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Smithsonian highlights

Planning a Smithsonian visit?

The new VHS video *Guide to the Smithsonian* is an excellent aid for previsit planning. For ordering information and the free Associates' Planning Packet, send a postcard to Associates' Reception Center, Smithsonian, Washington, D.C. 20560, or call (202) 357-2700. For hearing-impaired visitors, use TDD and call (202) 357-1729. Begin your visit at the Smithsonian Information Center, located in the Castle. Hours are 9 A.M. to 5:30 P.M. daily.

Regular hours resume

Smithsonian museums return to regular operating hours, 10 A.M. to 5:30 P.M. daily, on Tuesday, September 3. Hours for the Anacostia Museum are 10 A.M. to 5 P.M. daily. Extended summer hours continue at the National Zoological Park as follows: 9 A.M. to 6 P.M. for the animal buildings, through September 15; and 8 A.M. to 8 P.M. for grounds, through October 15.

Freer remains closed

The Freer Gallery of Art is closed until late 1992.

National Hispanic Heritage Month

The Smithsonian celebrates National Hispanic Heritage Month, September 15-October 15, 1991, with a variety of programs and activities. For information call (202) 357-2700, 9 A.M. to 5 P.M. For 24-hour recording, call (202) 357-4574 (Spanish) or (202) 786-2122 (English).

Special September exhibits and events

National Museum of American Art

Homecoming: William H. Johnson and Afro-America, 1938-1946 (September 13-

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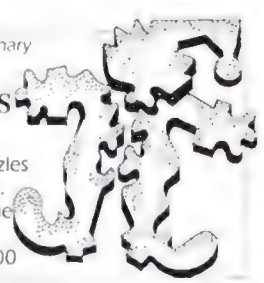

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March 1, 1992) Works by the African-American painter portray the black experience in this country during the late 1930s and the years of World War II. See *Highlights continued*, page 142.

National Portrait Gallery
Group Portrait: The First American Avant-Garde (through October 27) Exhibition focuses on the circles of Alfred Stieglitz, Marcel Duchamp, Gertrude Stein and Ezra Pound.

National Museum of Natural History
This Land Is Your Land: Celebrating 75 Years of Our National Park Service (through September 16) Panoramic photographs showcase the diversity and natural beauty of our national parks.
Life in the Ancient Seas New permanent installation features a simulation of a 230-million-year-old reef and a mural dramatizing life in the ancient seas.

National Museum of American History
Homeless in America: Three Perspectives (through September 30) Display features two photography shows and an exhibit of paintings that depict homelessness and poverty in the United States.
Nusantara: Lands and Peoples of Indonesia (through December 31) Rare books dating from the late 16th through 20th centuries.

National Air and Space Museum
Art of the Cosmic Age (through December) Exhibit features the work of contemporary Soviet, American, Canadian and European space artists.
Modern Carrier Aviation: Seapower in a Changing World Permanent exhibition looks at technology's impact on the aircraft carrier.

Texas Star is one of African-American quilts on view at the Renwick Gallery.

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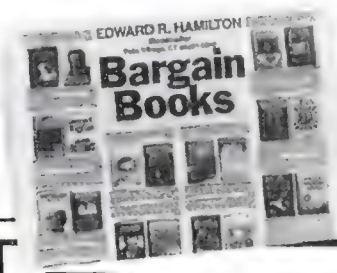

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Arthur M. Sackler Gallery
Indian Paintings and Drawings from the Collection of Howard Hodgkin (September 15-January 12, 1992) Works from the collection of the contemporary English painter represent India's three major regional styles.

National Museum of African Art
The Art of the Personal Object (opens September 25) New permanent exhibition examines the forms and functions of utilitarian objects from Africa. The show includes chairs, stools, headrests, pipes, drinking horns, bowls, baskets.
African Reflections: Art from Northeastern Zaire (through January 12, 1992) The refined and delicate art of the peoples of northeastern Zaire.

Hirshhorn Museum & Sculpture Garden
Directions—Adrian Piper: What It's Like, What It Is #2 (through September 22) Environmental installation raises questions about race and class.
Picasso Linocuts from the Museum's Collection (through November 11) Linocuts from 1962-63 attest to the artist's inventiveness in late life.

Arts and Industries Building Experimental Gallery
The Good, the Bad and the Cuddly: Human Attitudes Toward Animals (September 15-November 3) Exhibit encourages visitors to assess their own attitudes toward animals.
Rompiendo la Liga (September 23-November 10) Installation by Hispanic artist Celia Muñoz.

Anacostia Museum
Kaleidoscope: African American Photography in Washington, D.C. (through September 29) An exhibition of selected views from some 30 area photographers.

Renwick Gallery
Improvisation in African-American Quiltmaking (September 27-January 5, 1992) Display of work of contemporary quiltmakers highlights esthetic ties to textiles of the Congo and West Africa.

National Museum of the American Indian (New York)
A Gift from the Heart: Two Pomo Artists (through December) Baskets and ethnographic models of traditional ceremonial objects by California Pomo artists William and Mary Benson.

Cooper-Hewitt Museum (New York)
The Cooper-Hewitt Collections: A Design Resource (through August 1992) Some 1,200 objects chronicle the history and collecting philosophy of one of the most important repositories of design.

Exhibition catalogs

Catalogs available currently include:
Homecoming: The Art and Life of William H. Johnson (paper, $29.95)
Who'd a Thought It: Improvisation in African-American Quiltmaking (paper, $18)
To order, send check or money order to Smithsonian Museum Shops, 8308 Cinderbed Road, Newington, Virginia 22122. Include 15 percent of purchase to cover postage, handling (minimum, $1.75).

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Speakers Corner with Roger Mudd: New weekly radio series presents one-hour lectures by scholars and experts from around the world to audiences at the University of Chicago, the Smithsonian Institution and England's Oxford University. Check local listings.

Smithsonian National Associates

The Smithsonian will visit Boulder and Durango, Colorado, this month. The Boulder program (September 26-29) will feature lectures on native-American art and Southwestern cultural history. Durango events (September 24-26) will include lectures on Hispanic traditional art and folk art of the Southwest.

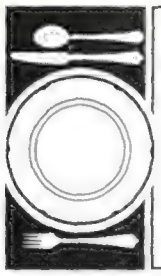
For further information, write or call U.S. and International Events Program, 490 L'Enfant Plaza, S.W., Suite 4210, Washington, D.C. 20560; (202) 287-3210.

Resident Associate Program

To become a Resident Associate, or for fee and ticket information, call (202) 357-3030. September events include:
Dinosaur! with Walter Cronkite (September 4; 7 P.M.) World premiere of first episode of new television documentary narrated by Walter Cronkite.
An Evening with Diane Rehm (September 24; 8 P.M.) *Newsweek*'s Eleanor Clift talks with the radio-show celebrity about her broadcasting career.
Terry Waldo's Gotham City Band (September 25; 7:30 P.M.) A salute to Jelly Roll Morton and American jazz.

Smithsonian Institution Traveling Exhibition Service

SITES organizes and circulates exhibitions to cities throughout the United States and abroad. To sponsor a show in your community, write SITES, Smithsonian, Washington, D.C. 20560. Here are some September exhibits:
• Bettendorf, Iowa (September 14-December 29) *All Systems Go: America's Space Transportation System for the 1990s*, Children's Museum.
• Denver, Colorado (September 13-December 8) *Tropical Rainforests: A Disappearing Treasure*, Denver Museum of Natural History.
• Nashville, Tennessee (September 1-29) *Victorian Gardens: A Horticultural Extravaganza*, Cheekwood Botanical Gardens.



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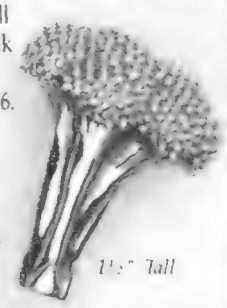
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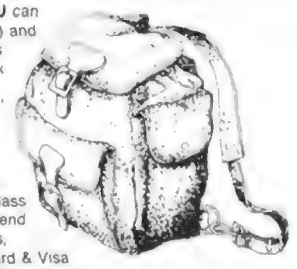

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The bold images of William H. Johnson

"In all my years of painting, I have had one absorbing and inspiring idea . . . to give—in simple and stark form—the story of the Negro as he has existed." So spoke African-American artist William H. Johnson in an interview with the *New York Amsterdam News* on the occasion of his 1946 exhibition at the New York Public Library.

During his brief, 20-year career, tragically cut short by a debilitating illness, this important but largely neglected painter produced a prodigious body of work. In 1971 the National Museum of American Art put on a major retrospective of his paintings (SMITHSONIAN, November 1971). Now, 20 years later, the museum has decided that it is time to take a new look. "Homecoming: William H. Johnson and Afro-America, 1938-1946" will focus on the artist's mature work, produced after he returned to America from an eight-year sojourn in Europe. The show, on view from September 13 to March 1, 1992, will include a number of recently restored paintings on public display for the first time.

From the cottonfields of the rural South to the dance halls and streetscapes of Harlem, Johnson's poignant, boldly colorful images seek to capture the spirit and soul of his subjects. He depicts everyday life head-on—in a style of patterned, quiltlike forms and contrasting colors that has been variously termed folk-inspired, naive and primitive—and portrays the history, imagination and vitality of his people.

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The multihued buildings and stylishly dressed couple of *Street Life, Harlem* (c. 1940) convey vitality and color of Harlem life.

SMITHSONIAN SEMINARS AND EXPEDITIONS

Seminars

(continued from page 75)

NEW **American Quilts** *October 7-10* Lectures, tours. Visit Lancaster, Pennsylvania.

Rome Seminar *October 9-21*

Civil War in Fredericksburg *October 11-14*

NEW **Middle East Update** *October 21-24* Diplomats, scholars and journalists discuss roots of conflict and prospects for peace.

Southwestern Art, Literature, Archaeology *October 27-31* Santa Fe, New Mexico.

NEW **Culture and Cuisine** *November 3-7* Explore New World and Old World foods.

Antique Furniture *November 12-15 or January 27-30* Includes Winterthur Museum.

NEW **Civil War at Gettysburg** *November 14-17 or May 6-9* Lectures, battlefield tours.

Egypt *November 14-30*

NEW **Santa Cruz Island Biology (California)** *November 20-24*

NEW **American Popular Song (New Orleans)** *December 1-5* Pianist John Eaton and jazz educator Ellis Marsalis.

Symbols of Faith: Exploring Western Religion and Art *January 12-16 or February 2-6*

Introduction to Rare Books *March 3-6* Includes Smithsonian, Library of Congress collections, antiquarian book fair.

Research Expeditions

Contribute your talent and financial resources to Smithsonian research. Work with curators at museums or in the field.

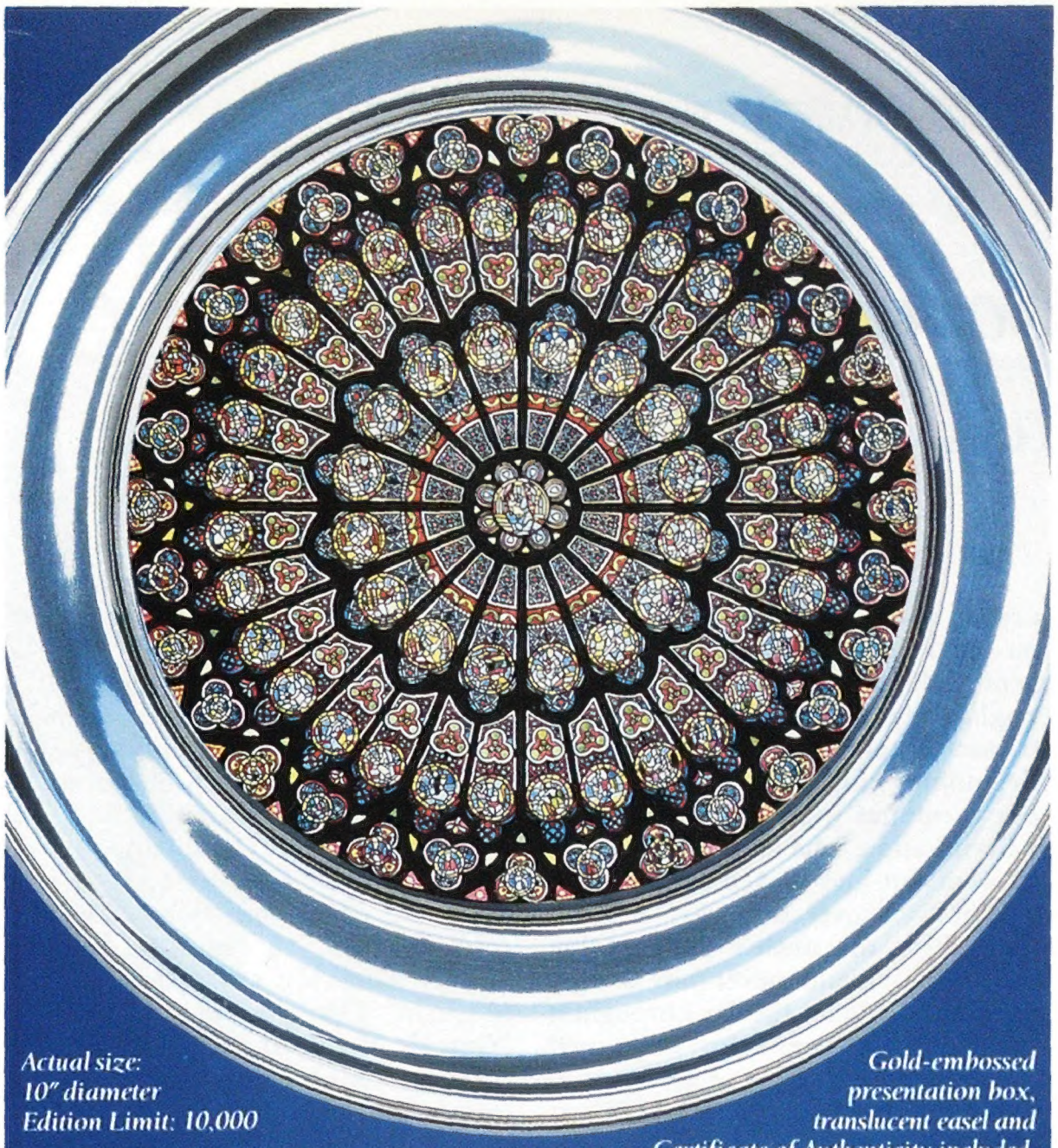
Costa Rica *September 29-October 11* Monitor volcanic activity, collect plants.

Washington, D.C. *October 27-November 2* Work on videodisk technology.

Edgewater, Maryland *November 2-11 or November 12-21* Map forest ecology at the Smithsonian Environmental Research Center.

Curaçao *February 16-28* Excavate giant tortoises of the Caribbean.

For seminar brochures, call (202) 357-4700; for expeditions, call (202) 287-3210. Or, write to the address on page 75.



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Using the same techniques perfected in the middle ages, The Stained Glass Guild's renowned artists apply 13 separate transparent enamels to thick, richly-textured cathedral glass. In miniature detail, they portray Mary and the Christ Child at the center, surrounded by a magnificent red and gold halo and concentric circles echoing the sun, moon, planets and stars; the prophets, judges, clergy and kings, and the brilliant 16-pointed star.

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By Bailey White

Someday the old junker will be a neat car again

It really makes you feel your age when you get a letter from your insurance agent telling you that the car you bought, only slightly used, the year you got out of college is now an antique. "Beginning with your next payment, your premiums will reflect this change in classification," the letter said.

I went out and looked at the car. I thought back over the years. I could almost hear my uncle's disapproving voice. "You should never buy a used car," he had told me the day I brought it home. Ten years later I drove that used car to his funeral. I drove my sister to the hospital in that car to have her first baby, and I drove to Atlanta in that car when the baby graduated from Georgia Tech with a degree in physics.

"When are you going to get a new car?" my friends asked me.

"I don't need a new car," I said. "This car runs fine."

I changed the oil often, and I kept good tires on it. It always got me where I wanted to go. But the stuffing came out of the backseat and the springs poked through, and the dashboard disintegrated. At 300,000 miles the odometer quit turning, but I didn't really care to know how far I had driven. A hole wore in the floor where my heel rested in front of the accelerator, and the insulation all peeled off the fire wall. "Old piece of junk," my friends whispered. The seat-belt catch finally wore out, and I tied on a huge bronze hook with a fireman's knot.

Then one day on my way to work, the car coughed, sputtered and stopped. "This is it," I thought, and I gave it a pat. "It's been a good car."

The mechanic laughed at me. "You know what's wrong with that car?" he asked. "That car is out of gas." So I slopped some gas in the tank and drove ten more years.

The fuel gauge never worked again after that, but I got to where I could tell when the gas was low by the smell. I think it was the smell of the bottom of the tank. There was also a little smell of brake fluid, a little smell of exhaust, a little smell of oil and, after all the years, a little smell of me. Car smells.

And sounds. The wonderful sound when the engine finally catches on a cold day, and an ominous *tick tick* in July when the radiator is working too hard. The windshield wipers said "Gracie Allen Gracie Allen Gracie Allen." I didn't like a lot of conversation in the car, because I had to keep listening for a little skip that meant I needed to jump out and adjust the carburetor. I kept a screwdriver close at hand, and a pint of brake fluid and a new rotor, just in case. "She's strange," my friends whispered. "And she drives so slow."

I don't know how fast I drove. The speedometer had quit working years ago. But when I would look down through the hole in the floor and see the pavement, a gray blur, whizzing by just inches away from my feet, and feel the tremendous heat from the internal-combustion engine pouring back through the fire wall into my lap, and hear each barely contained explosion, just as a heart attack victim is able to hear her own heartbeat, it didn't feel like slow to me. A whiff of brake fluid would remind me just what a tiny thing I was relying on to stop myself from hurtling along the surface of the Earth at an unnatural speed. When I arrived at my destination, I would slump back, unfasten the seat-belt hook with trembling hands and stagger out. I would gather up my things and give the car a last look. "Thank you, sir," I would say. "We got here one more time."

But after I received that letter I began thinking about buying a new car. I read the newspaper every night. Finally I found one that sounded good. It was the same make as my car, but almost new. "Call Steve," the ad said. I went to see the car. It was parked in Steve's driveway. It was a fashionable wheat color. There was carpet on the floor and the seats were covered with soft, velvety-feeling stuff. It smelled like acrylic, and vinyl, and Steve. I turned a knob. Mozart's Concerto for Flute and Harp poured out of four speakers. "But how can you listen to the engine with music playing?" I asked Steve.

I turned the key. The car started instantly. I fastened my seat belt. Nothing but a click. Steve got in the passenger seat, and we went for a test drive. We floated down the road. I couldn't hear a sound, but I decided it must be time to shift gears. I stomped around on the floor and grabbed Steve's knee before I remembered the car had automatic transmission.

"You mean you just put it in 'Drive' and drive?" I asked. Steve scrunched himself against his door and clamped his knees together. He tested his seat belt. "Have you ever driven before?" he asked.

I bought it. I rolled all the windows up by mashing a button beside my elbow, set the air-conditioning on "Recirc" and listened to Vivaldi all the way home.

So now I have two cars. I call them my new car and my real car. Most of the time I drive my new car. But on some days I go out to the barn and get in my real car. I shoo the rats out of the backseat and crank up the engine. Even without daily practice my hands and feet know just what to do. My ears perk up, and I sniff the air. I add a little brake fluid, a little water. I sniff again. It'll need gas next week, and an oil change. I back it out and we roll down the road. People stop and look. They smile. "Neat car!" they say.

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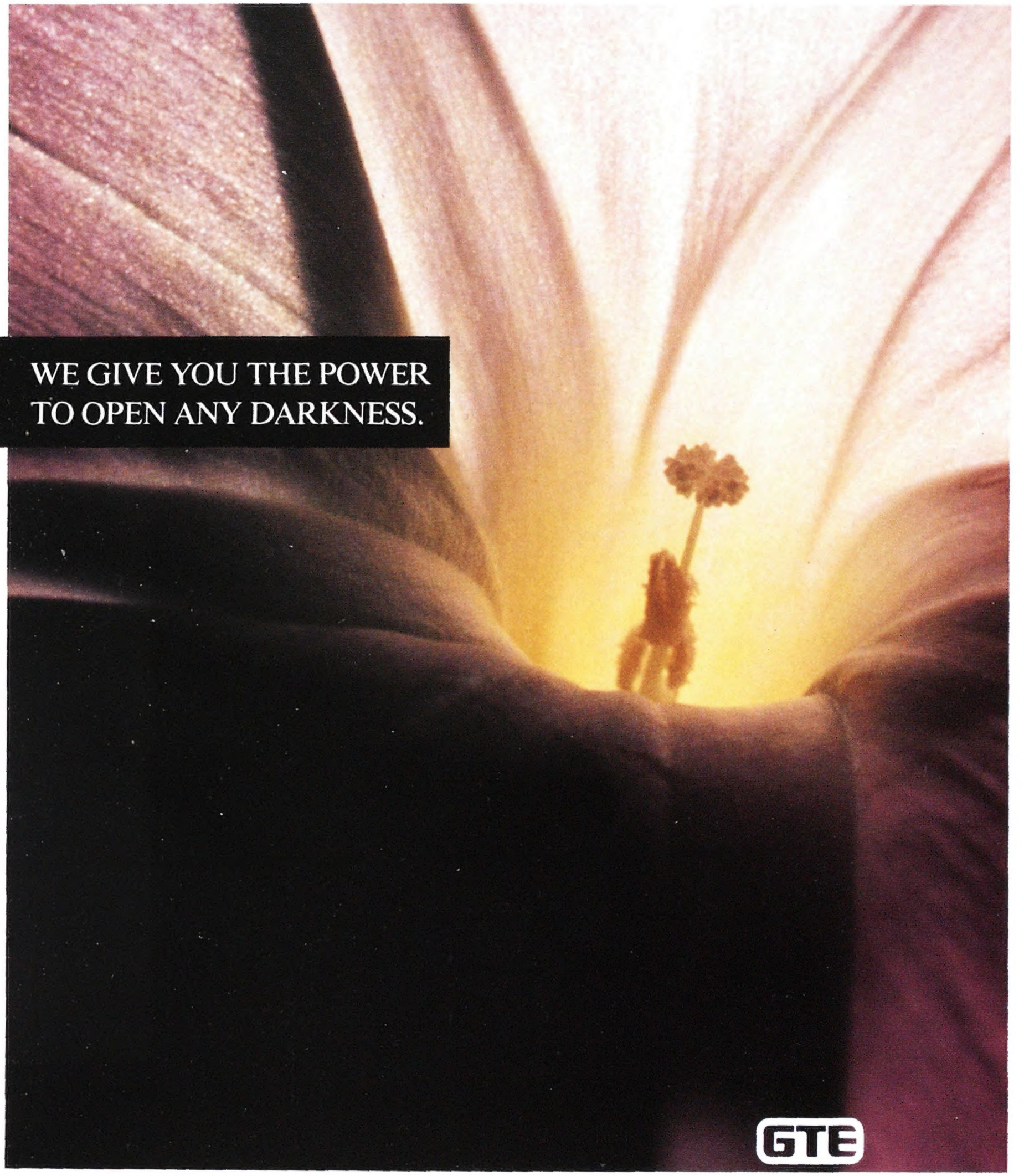

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